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ABSTRACT

This handbook presents management techniques, program ideas, and student activities for building comprehensive secondary career guidance programs. Part 1 (chapter 1) traces the history of guidance to set the stage for the current emphasis on comprehensive programs, summarizes four representative models for designing comprehensive programs, and cites additional models. Part 2 (chapters 2-7) identifies specific student practices for building a comprehensive program. Each chapter is organized into (1) narrative, with definition, rationale for use, summary appraisal of practices, and full description of an illustrative practice; (2) ten abstracts of practices, showing range, types available, costs; (3) additional practices; and (4) references. Chapter 2 focuses on curriculum-based practices--a broad approach to delivering career guidance practices. Chapters 3-5 present individual practices geared primarily to one developmental area. Titles are Self-Understanding and Occupational Knowledge Practices; Career Exploration and Decision-Making Practices; and Placement, Follow-Up, Follow-Through, and Employability Skills Practices. Chapter 6 addresses the needs of women and special sub-populations. Chapter 7 concerns computer-based career guidance practices. Part 3 (chapter 8) discusses the implementation of programs and practices under these topics: change agent roles for counselors, a seven-step strategy for effecting change, and a review of roadblocks to change. (YLB)

**BUILDING COMPREHENSIVE CAREER GUIDANCE
PROGRAMS FOR SECONDARY SCHOOLS**

A Handbook of Programs, Practices, and Models

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ALTERNATIVE CAREER GUIDANCE PRACTICES PROJECT, 1977

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National Institute of Education**

TABLE OF CONTENTS

FOREWORD	v
PREFACE	vii
USING THIS BOOK	ix
PART I	
Building Comprehensive Career Guidance Programs	1
Chapter 1 (by Norman C. Gysbers) Comprehensive Career Guidance Programs	3
PART II	
Alternative Practices for Building Comprehensive Career Guidance Programs	25
Chapter 2 Career Guidance Curriculum Practices	27
Chapter 3 Self-Understanding and Occupational Knowledge Practices	53
Chapter 4 Career Exploration and Decision- Making Practices	79
Chapter 5 Placement, Follow-Up, Follow-Through, and Employability Skills Practices	105
Chapter 6 Career Guidance Equity Practices	145
Chapter 7 (by JoAnn Harris-Bowlsbey) Computer-Based Career Guidance Practices	191

PART III

Installation Strategies for Building Comprehensive Career Guidance Programs	219
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Chapter 8 (by Garry R. Walz) Strategies for Adopting, Implementing, and Evaluating Career Guidance Practices	221
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APPENDICES

A. Evaluation Resources for Career Guidance	235
B. Supplementary Sources of Career Guidance Practices	237
C. Career Guidance Related Periodicals	239
D. Publishers and Addresses	241
E. How to Order from ERIC	255
INDEX	257

FOREWORD

The growth of the career education movement over the past several years has generated an abundance of ways to guide students in their career development. As educators, we are responsible to society for delivering career guidance in the most effective and meaningful way possible. At the same time, we must be sensitive to the changing needs of the students we serve and society. This demands that we find the best ways of managing our educational programs, especially career guidance programs for secondary school youth. The potential of systems management has yet to be realized. The systems approach to managing career guidance programs promotes measurable comprehensive student objectives being achieved efficiently and effectively. Therein lies the value of this book, in that it is a source for building comprehensive programs.

The National Center for Research in Vocational Education is pleased to have cooperated with the Education and Work Group of the National Institute of Education in the development of *Building Comprehensive Career Guidance Programs: A Handbook of Programs, Practices, and Models*. We are especially indebted to Dr. Robert I. Wise, project officer, for his creative leadership. We congratulate Dr. Robert E. Campbell, project director, and his staff, Helen D. Rodebaugh and Paul E. Shaltry, for what should prove to be a lasting contribution to the improvement of career guidance nationally.

Additionally, the scholarly and perceptive chapters prepared by Dr. Gysbers, Dr. Walz, and Dr. JoAnn Harris-Bowlsbey, Director of the Discover Foundation, Westminster, Maryland, are much appreciated and most welcome contributions to this book.

The National Center also acknowledges the distinguished advisory panel members who assisted with this effort. They are: Dr. Norman C. Gysbers, Professor of Education, University of Missouri-Columbia; Mrs. Thelma Lennon, Director, Guidance and Testing, North Carolina State Department of Education; Dr. Garry R. Walz,

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Dean, College of Business Administration, Temple University.**

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PREFACE

We have prepared this book for guidance specialists, administrators, counselor educators and consultants who are involved with shaping career guidance programs. While the content is aimed at programs at the secondary level, the processes for building comprehensive career guidance programs are applicable at all levels. The book's intent is to promote comprehensive programs which systematically and consistently serve the career planning needs of all students. Hopefully, the management techniques, program ideas, and student activities presented will serve to upgrade career guidance programs and relieve the guidance profession from charges of having piecemeal and ineffective programs for students.

Basically, comprehensive career guidance programs are presented here as: ideas and student activities. In Chapter 1, Dr. Norman Gysbers, Professor of Education, University of Columbia, has contributed his thinking about the structure and purpose of comprehensive programs. Dr. Garry Walz, Professor of Education and Director of ERIC-CAPS, University of Michigan, addresses, in Chapter 8, the implementation of comprehensive programs.

Student activities which can be used to build comprehensive programs are identified and assigned to career development and special group categories in Chapters 2 through 6. In Chapter 7, Dr. JoAnn Harris-Bowlsbey, Director, Discover Foundation, Westminster, Maryland, discusses the unique capability and potential of computer-assisted guidance within the framework of comprehensive programs.

Student activities, or practices, are defined as any learning experience that contributes directly to the career maturity, career development, or career planning skills of students. Practices may be experienced through self-instruction, using a variety of hardware and software methods, or through interaction with others. Practices are found both in and out of the traditional secondary school curriculum. It should be noted that career guidance evaluation is recognized as a key component of a comprehensive program and is discussed throughout this book. Readers are directed, however, to

the *Career Education Measurement Series, 1978*, (cited in the appendix) for specific instruments and their use.

Three methods were used to identify practices that have been developed since 1972 and are generally available. A computer search of the ERIC system yielded available practices up to November 1977. A mail survey of 1,100 commercial publishers and educational agencies was conducted during the spring of 1977. The third method was a review of other publications that identified similar student activities. (A list of these resources is in the appendix.) The authors realize some worthy practices may have escaped our attention but, in general, we think we have captured the majority of available practices. We are indebted to the many people who promptly and graciously provided us with complete information. Any inaccuracies, of course, are the responsibility of the authors. We welcome any additions or corrections that will improve the usefulness of the book.

We are grateful to the following staff members of the National Center for Research in Vocational Education for their helpful reviews of and suggestions for individual chapters: Dr. James W. Altschuld, Dr. Michael Black, Ms. Carolyn Burkhardt, Mr. Larry Dennis, Ms. Carole Johnson, Dr. Marion Johnson, Dr. Norman M. Singer, and Dr. Louise Vetter. Others who assisted in the review process were: Dr. Raymond Wasil, Director, Division of Guidance and Testing, Ohio Department of Education; Dr. Charles E. Weaver, Project Director, Cooperative Rural Career Guidance System, Northern Michigan University; and Dr. Carol Zumbrunnen, Guidance Specialist, Redmond, Washington.

We are indebted to Ms. Melissa Widner who edited the manuscript and encouraged us to write what we were thinking and to Ms. Nancy Robinson, project secretary, who assisted us through drafts and revisions until the final manuscript was ready for press. To both, we say thanks.

USING THIS BOOK

The reader is invited to consider the structure and meaning of the various elements of this book before proceeding. By considering the information below, the remainder of the book should be easier to use.

Major Parts. The book is divided into three main sections: Part I (Chapter 1)—Building Comprehensive Career Guidance Programs, Part II (Chapters 2-7)—Alternative Practices for Building Comprehensive Career Guidance Programs, and Part III (Chapter 8)—Installation Strategies for Building Comprehensive Career Guidance Programs.

Chapters. Chapters 1 and 8, respectively, provide an orientation to comprehensive career guidance program models and how to implement and evaluate practices within the framework of comprehensive programs. Chapters 2-7 identify specific student practices with which a comprehensive program can be built. In Chapters 2-7 categories of practice are defined, reasons are presented for having them in the school, an overview of available practices is given, installation considerations are outlined, and practices are identified.

Practices. Only practices that are generally available are identified. Practices are placed in certain categories according to their major emphasis. It is recognized that many practices overlap in actual use. For example, a student activity designed primarily for decision-making but also having elements of self-awareness and career exploration, would be assigned to the career decision-making part of Chapter 4.

Neither time nor data were available to evaluate any of the practices cited. The way in which they are presented should not be construed as an endorsement or preference by the authors. Illustrations are to make practices which we have described in a certain category more understandable. Abstracted practices simply show the range of available practices in a particular category. Additional practices are listed for the readers' information. References are

provided for readers who want to pursue more information related to a particular chapter.

Availability of Practices. Actual materials are available from one of three sources and are so identified when cited. Sources are: commercial publishers, education agencies (including ERIC), and the Government Printing Office (GPO). Full names and addresses for acquiring materials are included in the appendix. Instructions for using and ordering ERIC documents are also included.

Costs. Costs are reported when they were supplied with the practice. Costs must be regarded as tentative due to market conditions. They are included mainly as estimates for the reader. Costs for implementation were not devised because they depend on each school's situation.

Appendix. The appendix lists sources for acquiring practices and information that will facilitate building comprehensive career guidance programs.

ERIC Accession Numbers. ED numbers are listed in this book for abstracted practices when a given practice is available through the ERIC system. Additional practices available only through ERIC also have ED numbers. Some practices may be available through ERIC, but do not have ED numbers. These, however, are available from the sources cited.

PART I

BUILDING COMPREHENSIVE CAREER GUIDANCE PROGRAMS

For at least a decade the need for the installation of comprehensive career guidance programs has been well documented. This need has been emphasized by many national evaluations which concluded that (1) career guidance has to be more than just a fragmented collection of services, (2) guidance has not been nearly as effective as it could be in meeting the needs of students, (3) the technology exists in the form of models and techniques for the installation of comprehensive programs, (4) pre- and in-service training is needed to update the guidance profession in new technology and the development of comprehensive programs, and (5) a major change in administrative support for guidance is necessary in order to permit adequate resources and planning time for the installation of comprehensive programs.

Chapter 1, Comprehensive Career Guidance Programs, provides an informative overview of alternative models for building comprehensive career guidance programs. It first discusses the changing historical eras in guidance as a way of setting the stage for the current emphasis on comprehensive programs. The next section, which represents the bulk of the chapter, summarizes four representative models for designing comprehensive programs. The conclusion of the chapter cites additional models.

As a final note, the reader is reminded that although Chapter 1 gives the macro framework and rationale for building comprehensive programs, Chapters 2-8 provide supportive information for the actual implementation of such programs. In a manner of speaking, Chapters 2-7 give options for the inclusion of specific practices as building blocks or elements of a comprehensive program. Chapter 8 speaks to the nuts and bolts of installation. All elements are needed to effectively build comprehensive career guidance programs.

Chapter 1

Comprehensive Career Guidance Programs

As public expectations increase for individualizing the educational process, as some options open for education beyond high school and as the job market shifts with the ebb and flow of social and technological change, the challenge and the responsibilities resting upon the country's school counselors become steadily more demanding. (Marland 1977, p. 7)

Never, in any period in our professional history, has the demand for guidance and counseling programs and services been greater. Support for this statement can be inferred with little difficulty from the frequent mention in federal legislation of the need for guidance and counseling. The Educational Amendments of 1976 (P.L. 94-482) for example, call for guidance and counseling programs and services in all of its major titles. Support for this statement also can be inferred from the established position of counselor or personnel worker at all levels in our nation's schools, in rehabilitation agencies and the Job Service, and in private agencies across the country. It is also clear in statements by individuals in policy making positions at national, state and local levels responsible for planning, funding and managing guidance programs that guidance practitioners, particularly those in schools, are expected to carry on a greater variety of guidance activities than previously.

As these substantial expectations influence the practice of guidance in the schools, guidance personnel are confronted with complex problems of coordination and implementation. On the one hand they are expected to continue carrying out traditional tasks such as individual counseling, teacher and parent consultation, testing and scheduling activities and other administrative-clerical duties. At the same time they are also expected to coordinate, if not actually deliver, an expanded variety of new guidance activities. Often these two sets of expectations are in such conflict that there is only a

sporadic application of these new activities, with little attention devoted to how these new activities and more traditional activities should be organized.

To help us understand how these expanded expectations for guidance and counseling cause conflict between practitioner role and function and influence how guidance programs are organized in the schools, it is necessary first to review briefly the history of our field. Based on this review, the next step is to examine emerging practices in guidance organization and administration for ways to effectively combine traditional guidance activities for those created by the increased expectations of our consumers.

A Brief History

The history of organized guidance in the United States can be divided into three distinct but overlapping time periods. The first period began around the turn of the century and continued into the 1920s. It was characterized by an emphasis on the transition from school to work, the choice of and appropriate preparation for an occupation, and the attainment of success (Parsons 1909). The second period emerged in the 1920s as distinct changes began to occur in the theory and practice of guidance. Beginning in the 1920s, guidance theory and practice became more clinically oriented. Increasingly, emphasis was placed on counseling for personal adjustment. This emphasis continued to dominate the field until the late 1960s. Today, guidance is entering a new era. The focus is on comprehensive guidance programs organized systematically around person-centered outcomes.

The Early Years: Guidance for Selection and Placement

A major emphasis of guidance from 1900 to 1920 was the transition from school to work. The term vocational guidance was used for the first time by Frank Parsons in 1908 to define and describe organized guidance activities which assisted individuals in this transition process (Davis 1969). Parsons' book, *Choosing a Vocation* (1909, p. 5), contains a succinct summary of the principles of vocational guidance.

In the wise choice of vocation there are three broad factors: 1) a clear understanding of yourself, your aptitudes, abilities, interests, ambitions, resources, limitations, and their causes; 2) a knowledge of the requirements and conditions of success, advantages and disadvantages, compensation, opportunities, and prospects in different lines of work; 3) true reasoning on the relations of these two groups of facts.

Parsons' formulation indicates that he viewed vocational guidance as a series of contacts with a counselor in which individuals would come to an understanding of self and the work world. Self-study was an important part of this process. The anticipated outcomes of these activities were that individuals would choose appropriate occupations and then prepare and progress in them.

Change in Theory and Practice: Guidance for Adjustment

By 1920, Parsons' formulation plus those of such early leaders as Jessie Davis, Anna Reed and Eli Weaver had spread across the country. However, during the early 1920s a number of visible shifts began to occur in these early approaches. Gradually, traditional vocational concerns began to be overshadowed by the educational and psychological problems of personal adjustment (Johnson 1972). Vocational guidance began to take on a more personal, diagnostic, and clinical orientation. As a result, a new model began to emerge—one that was clinical in nature. Counseling, rather than guidance, became more popular.

By the beginning of the 1930s, as a result of the continuing influence of such movements as testing and mental health, the clinical model of counseling with its emphasis on personal counseling dominated professional theory and practice (Rudy 1965, p. 25).

Up to 1930, . . . not much progress had been made in differentiating this function (personal counseling) from the pre-existing programs of vocational and educational guidance. After that date, more and more of a separation appeared as guidance workers in high schools became aware of increasingly large numbers of students who were troubled by personal problems involving

hostility to authority, sex relationships, unfortunate home situations, and financial stringencies.

While the personal adjustment theme continued to play a dominant role in guidance theory and practice from the thirties through the sixties, the earlier conception of guidance as vocational guidance, continued to show strength too. This was apparent in the efforts of such organizations as the National Vocational Guidance Association and the federal government as they worked to develop and improve occupational information and vocational guidance practices during the 1930s (the depression years) and the 1940s (the war years and returning veterans). It was apparent too, in federal legislation including the George-Borden Act of 1946, the Vocational Education Act of 1963, and the Amendments to that Act in 1968.

A New Focus: Guidance for Development

Although the personal adjustment theme for guidance continued to play a dominant role in guidance theory and practice through the 1960s, it was clear that substantial changes were beginning to be advocated by that time. The call for change in the 1960s came from diverse sources: writers who were interested in career guidance and development (Ashcraft 1966; Hoyt 1974); Tennyson, Soldahl and Mueller 1965); individuals who were concerned about the efficacy of the prevailing model of guidance (Borow 1966; Aubrey 1969); writers who were concerned about program evaluation (Wellman and Twiford 1961; Wellman 1968); and individuals who advocated a developmental approach to guidance (Mathewson 1962; Zaccaria 1966). The call for change was reinforced by the accountability movement in education which had begun during the 1960s. As education was called to account for its products, so too was guidance.

Although the calls for change came from differing views of guidance, they converged around the need to define and implement guidance as a systematic program. This presented a problem, however, because traditional concepts of vocational guidance and of personal adjustment counseling emphasized techniques, not purposes or outcomes (Sprinthall 1971). All was not lost however, because by 1970, substantial preliminary work had been done in developing

basic vocabulary and other necessary constructs to define and implement guidance in systematic, comprehensive, and developmental terms as a program in its own right rather than as services ancillary to other programs.

As early as 1961, Glanz (1961) identified and described several models for comprehensively organizing guidance. Tiedeman and Field (1962) recommended that guidance be an integral part of education—that it have a developmental, liberating perspective. Similarly, Zaccaria (1965) described the use of developmental tasks as a basis for a programmatic theme for guidance.

Paralleling this work was the beginning application of systems-thinking to guidance. Based on a nationwide survey of vocational guidance in 1968, the development of a systems model for vocational guidance was undertaken at The Center for Vocational Education in Columbus, Ohio (Campbell et al. 1971), Ryan (1969), Thorensen (1969), and Hosford and Ryan (1970) also proposed the use of systems theory and techniques to develop and implement comprehensive guidance programs.

In 1970, McDaniel proposed a model for guidance called Youth Guidance Systems. It was organized around goals, objectives, programs, implementation plans, and designs for evaluation. Closely related to this model was the Comprehensive Career Guidance System (CCGS), developed by personnel at the American Institutes for Research (Jones et al. 1971; Jones et al. 1972). The CCGS was designed to systematically plan, implement, and evaluate guidance programs. Systems-thinking also undergirded Ryan and Zeran's (1972) approach to the organization and administration of guidance services. They stressed the need for a systems approach to guidance to insure the development and implementation of an accountable program of guidance.

Additional support for systematically organized, comprehensive guidance programs was provided by the development of state guides for integrating career development into the school curriculum in a number of states in the early seventies. One such guide was developed by the state of Wisconsin (Drier 1971) in the summer of 1970, closely followed by the development of the California Model for Career Development in the summer of 1971 (California State Department, 1971).

That same summer, the University of Missouri was awarded a U.S. Office of Education grant to assist each state, the District of Columbia, and Puerto Rico to develop models to implement comprehensive career guidance, counseling and placement programs in local schools. By 1974, when the project ended, 44 states had developed some guide or model for developing and implementing comprehensive career guidance, counseling and placement in local schools. As this project was unfolding, so too was career education. As a result, in a number of states, the guides/models under development were titled career education rather than career guidance guides or models.

Comprehensive Career Guidance Programming

As we saw in this brief historical review, by the end of the 1960s, a number of factors had emerged to establish the need for, and the advantages of, comprehensive, systematic approaches to guidance and counseling. Campbell (1975, p. 196) listed five such advantages:

1. They increase the probability that a given goal will be achieved. The entire approach is mission or target-oriented, and all effort gives final priority to the achievement of the mission.
2. A systems approach enables one to see the "big picture," it shows all the relationships of the components and their flow from start to finish.
3. Systems approaches facilitate the management and monitoring of a program. Problems and impediments to achieving a goal can be spotted, and time deadlines can be adjusted.
4. The identification of alternative methods for achieving a goal is stressed. Since systems thinking creates a searching attitude, staff are challenged to look for better ways to get the job done. Identifying alternative methods also insures "back-up" plans if the primary plan breaks down.

5. Program evaluation procedures are built into the system. Through trial installation, monitoring and feedback, a program is continuously assessed to determine the degree to which it is achieving its intended goal and to guard against stagnation.

We also saw in the review that the know how—the vocabulary, the constructs and the techniques—to create a comprehensive, systematic approach to guidance had begun to emerge by the close of the 1960s. As a result, when the 1970s began to unfold, a number of comprehensive, systematic approaches to guidance were being developed and implemented. And, while each of these approaches contained unique ways of developing and implementing a guidance program, much commonality existed. Most of the systems contained such elements as needs assessment, goals and objectives, sequenced activities, time-task-talent-resource management procedures and evaluation. How these and other systems elements were defined and organized within a given approach provided its unique character.

A Hypothetical Program: West Bay Public Schools, U.S.A.

Although a number of planning models exist for developing a comprehensive career guidance program there is no fully developed operational program to serve as an exemplar (Vetter 1977). In the absence of an ideal model, the following hypothetical program provides a picture of a comprehensive career guidance program in operation. It attempts to show the development of the key components of a comprehensive program through the perspective of school participants, that is, students, teachers, administrators, and counselors. It begins with the observations of Debbie, a senior at West Bay High School.

Debbie was 10 minutes early for her appointment at the school placement office. She was glad she was early since it gave her a chance to reflect on what she would tell Mr. Adkins, the placement coordinator. He had been very helpful; he had helped her with two major events. Through his assistance, she was completing the final admissions forms for the med-tech program at West Bay Community College and arranging for a good summer job as a hospital lab assistant. This was one of the happiest days for her in the past three years. Just six months ago, she was in a fog. There was growing

pressure to make a decision. Now everything is fitting together. Discussions in Mrs. Bowls' class were more meaningful for her. Mrs. Bowls, a chemistry teacher, devoted one class period each week to discussing career options in science.

The career options program was a new activity at West Bay High School. It was part of a larger comprehensive career guidance program which included the placement office. Debbie and her classmates were profiting from this new program. It provided quite a contrast to the high school in East Bay where she lived two years ago. East Bay was a zero. The school staff seemed apathetic about what happened to their students after they left. They probably were not really apathetic. They had the same resources as West Bay but they lacked something. It was just that they were not organized and lacked the motivation to help kids with their career plans.

At East Bay, Mr. Doyle taught chemistry, but never mentioned chemistry careers. The counselors routinely gave interest tests, but did not allow enough time for student interpretation. They scheduled courses, arranged college nights for a handful of students, and spent a lot of their time helping the principal with administrative duties. You were embarrassed to ask for an appointment because you felt you were bothering them. You went to the guidance office with your face covered hoping no one would see you because most of the students that went there were "call-ins" for disciplinary reasons.

Of course, West Bay High was not always the shining light. It, too, was in many ways like East Bay. It all got started three years ago. Mrs. Blend, the guidance director, returned from a conference all steamed up. She had been unhappy about the ineffectiveness of her program for quite a while, but the conference helped her to see a solution more clearly. She learned about a new guidance program, and she sought the principal's permission to install it at West Bay.

At first, Mr. Task was hesitant, fearing that it would demand too much of her time, but as he further examined the new program he began to see many benefits for the entire school and community. He, too, had been searching for a vehicle to make the total school program more effective. He felt the school had a dedicated faculty, good resources, but the curriculum was too fragmented to help all students with their career planning. It lacked continuity and student relevance. He saw Mrs. Blend's new program as a way not only to

improve guidance, but also integrate the curriculum and involve the entire faculty. He was weary of hearing complaints from students that English 210 leads nowhere or from faculty that the math department doesn't understand vocational education. He was looking for something that would reawaken the faculty to the fact that kids were the priority. The comprehensive guidance program stressed this.

The basic idea of a comprehensive approach to guidance is to systematically build a program which is fully responsive to measured student needs. The program advocates optimum use of all relevant local resources in providing guidance services for meeting student needs such as school-community placement, classroom-based career planning activities, and student developmental experiences. The primary advantage of a comprehensive approach is that it insures a coordinated, sequential program of career planning and placement for students.

For example, in West Bay's comprehensive approach to career guidance, optimum use of local resources is demonstrated by their exploration and placement components. Their goal for student exploration is to provide breadth as well as depth exploration of careers through a variety of modes. In other words, they want to insure that each student has the opportunity to explore the broad range of careers, e.g., 15 career clusters, to see the big picture of career paths as well as experiencing in-depth exploration of career preferences. Broad exploration is achieved through coordinated school-based activities, most of which occurs in the classroom and is curriculum related.

In-depth, exploration is accomplished through a combination of school and community activities. Through the assistance of the guidance department, each student is encouraged to acquire real world exploration of up to three careers. The student spends approximately 40 hours of exploration for each career in a mini-internship mode. He is also encouraged to evaluate each exploration in terms of how well the career fits his career expectations.

The goal of West Bay's placement service is to provide services to students up to two years after graduation. West Bay has developed extensive cooperative arrangements with local employers and agencies to facilitate placements. They also maintain a computerized job

search service through the state employment office which serves the dual purposes of searching placement opportunities and aiding career exploration. Approximately 600 students use the service annually and follow-up surveys indicate that the program is successful.

When Mrs. Blend and Mr. Task first started the new program, it seemed overwhelming to implement. But once they got their initial committees organized, the program became manageable. The joint community-school advisory committee offered a lot of ideas and support. Mr. Task had not realized before how many community resources were available. They all seemed to fit. The student-faculty steering committee pitched right in. They generated a lot of school support through the first activity, conducting a student needs survey. The survey not only clarified program goals, it also made points with the school board. The school board saw a clear set of accountable goals. There was no more fuzziness as to what services would be delivered to the students. The new program based on the survey included provisions for career exploration activities, decision-making training, and a placement service. The board realized these provisions were not revolutionary, but they were intrigued by the way the services were being provided. For the first time career exploration was not limited to the guidance office. It permeated the whole school and the community. Teachers were part of it through classroom activities. Even the local television station promoted career planning through public service announcements. Of course, none of this came overnight.

The steering committee realized that all goals could not be achieved the first year, and goals had to be added to the core set of goals incrementally. The core goals and the initial momentum were the key. Once organized and committed, the steering and advisory committees found ways to implement new goals.

The program was not without its problems. As with any new program, it had its skeptics and dissenters. It was pretty hard to obtain 100 percent support. Some joined later, but there was always the 10 percent who resist change. The program got some help with this, however, from the local university. The education faculty offered special courses to update teachers and counselors on guidance program planning and curriculum activities. This worked well because the high school faculty could simultaneously obtain graduate credit and prepare classroom activities.

Another bright spot was the cost. It was first thought that it would be expensive to implement, but the school was surprised to learn new costs were minimal. Sure, there were some new costs for mimeographing, postage, and new materials, but most of the other resources were already present. It was more a matter of reorganizing what currently existed rather than purchasing new materials or hiring new staff.

This year represents the third year of the new program. Although the school is pleased with its new program, it is very easy to become complacent. To guard against complacency, the school plans to conduct periodic evaluations of the program which was part of the original planning model. The evaluation will examine the total program to see if there are weak spots that can be strengthened. They will be asking a lot of basic questions such as: Are the goals still relevant for students? Should new goals be added? Are students getting the most out of services? Are special groups of students being overlooked? Does the school have adequate materials and are they up to date? Does the whole school feel involved? Are there any new wrinkles they could add? Do they have effective public relations with parents and the community? The evaluation sounds like a big job, but it should not be too bad since they already have an established student-faculty task force to achieve this activity. And to make their evaluation job a little easier, several graduate students from the university will help.

Although a lot more could be said about the program at West Bay, this is a quick glimpse of one school's efforts. West Bay has had a lot of visitors. In fact, one of their most frequent visitors is East Bay, which is revamping their program. West Bay enjoys telling others about their program and hopes it will encourage others to reexamine their programs.

Systematic Approaches

The list of systematic approaches to comprehensive guidance programming which follows is not exhaustive. Rather, several representative approaches will be presented in summary form to illustrate how a number of individuals envision a comprehensive, systematic program. Those approaches to be presented include: The Career Planning Support System—The Center for Vocational Education; the Comprehensive Career Guidance System—American

Institutes for Research; the Cooperative Rural Guidance System—The Center for Vocational Education and the Missouri Comprehensive Guidance Program—University of Missouri-Columbia. Following the presentation of these approaches are a number of additional programs which also outline procedures to develop and manage comprehensive, systematic guidance programs.

Career Planning Support System (CPSS)
The Center for Vocational Education
The Ohio State University

This system provides educational personnel with a package of procedural guides, audiovisuals, survey instruments and staff training manuals which gives them step-by-step processes to assess, plan, develop, implement and evaluate their programs. While the system was designed for use in high schools, the basic processes can be used to plan programs in elementary, junior high and/or post-secondary settings. The system's prototype was tested in six pilot high schools in Arizona, Georgia, Oregon, Texas and West Virginia. Later, field testing was completed in 12 states involving 38 schools.

The development of The Career Planning Support System model was supported by the Education and Work Group of the National Institute of Education and is designed around a step-by-step approach to program planning. There are six steps in all (Campbell 1975).

Step 1: staff orientation, decision and organization. In Step 1, time is spent informing staff about the Career Planning Support System and its potential. Once school staff and community members agree to participate, the support system provides ways to involve appropriate individuals through a committee system.

Step 2: assessing needs and resources. Next, the model provides procedures to assess the career guidance needs of those to be served. In a similar manner, current program resources also are assessed. Survey instruments and procedures to tabulate the resulting data are provided.

Step 3: specifying goals and student behavioral objectives. Manuals and procedural guides which provide staff with the knowledge and skill to identify and write program goals and student

behavioral objectives are part of Step 3. These guides are used by previously identified committees as they analyze student data and current program resources.

Step 4: generating alternative methods. Procedures to select activities and methods designed to accomplish the chosen goals and objectives are provided in Step 4. The committees responsible for selecting activities and methods use techniques devised by the Career Planning Support System. They also use handbooks and references suggested by the system.

Step 5: designing program evaluation. Before system implementation occurs, planning for evaluation must take place. Using techniques and resources available in the system, this is done in Step 5. Feedback loops are an integral part of the evaluation thinking in this system.

Step 6: implementing planned change. Specific attention is given in Step 6 to implementation facilitators and barriers. Procedures to implement the program in light of local facilitators and barriers are provided in the system's manuals that focus on this step.

For further information concerning the Career Planning Support System's coordinated series of manuals, instruments, audio-visual aids and supplemental materials, write to the National Center for Research in Vocational Education, The Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210. The complete system is now available.

Comprehensive Career Guidance System American Institutes for Research

This system consists of a series of 12 modules and accompanying coordinator's guides which focus on program development. The modules and guides were designed to be used in preservice and inservice education to teach guidance practitioners the skills of program development. The system was developed by personnel of the Youth Development Research Program of the American Institutes for Research, Palo Alto, California.

The 12 modules are grouped into five major categories: orientation, planning, structuring, implementing, and cost-impact

decision making. Brief descriptions of the modules in each of these categories are presented in the following paragraphs to provide you with an idea of the contents of each module.

Orientation. Module 1, Career Development Theory: An overview of career development theories showing how such theories assist developers in stating program philosophy and assumptions. **Module 2, Program Development Model:** An overview of a systematic approach to planning, implementing and evaluating comprehensive guidance programs. **Module 3, Assessing Desired Outcomes:** This module presents rationale, techniques and instruments to assess the outcomes of the program. **Module 4, Assessing Current Status:** This module presents rationale, techniques and instruments to assess the current status of the existing program. **Module 5, Establishing Program Goals:** Module 4 describes how to establish goals for guidance programs using the results of desired outcome and current status assessments.

Structuring. Module 6, Specifying Student Performance Objectives: Module 6 presents knowledge and skills needed to write student performance objectives. **Module 7, Selecting Alternate Program Strategies:** This module discusses procedures to select appropriate guidance strategies to accomplish the objectives of guidance programs.

Implementation. Module 8, Specifying Process Objectives: This module describes how to organize and manage resources via process objectives to accomplish the outcome objectives of the guidance program. **Module 9, Developing Program Staff:** Module 9 presents knowledge and skills related to carrying out staff development activities. **Module 10, Trying Out and Monitoring:** Module 10 describes procedures to conduct and measure the effects of tryouts and early implementation efforts.

Cost-impact decision-making. Module 11, Conducting Product Evaluations: This module describes the importance of summative or final evaluation and discusses the skills needed to design and carry out program evaluation. **Module 12, Communicating Evaluation Results:** This module describes procedures to produce an evaluation report.

Information about the Comprehensive Career Guidance System can be obtained by writing American Institutes for Research, Post

Office Box 1113, Palo Alto, California. 94302. For those interested in a description of the procedures used to produce and field test these modules this information is contained in:

Dayton, C. *A Validated Program Development Model and Staff Development Prototype for Comprehensive Career Guidance, Counseling, Placement, and Follow-up.* American Institutes for Research, Palo Alto, Final Report. Grant No. OEG-0-74-1721, January, 1976.

Cooperative Rural Career Guidance System-Center for Vocational Education

This system presents techniques, methods and resources to develop, implement, and evaluate comprehensive career guidance, counseling, placement, and follow-through programs (K-14) in rural schools. It was developed collaboratively by The Center for Vocational Education, The Ohio State University, the Wisconsin Vocational Studies Center, and Northern Michigan University under the sponsorship of the U.S. Office of Education, Bureau of Occupational and Adult Education. Rural educators, students and community members in the states of Ohio, Wisconsin and Michigan, and members of a national advisory committee participated in its development.

There are 16 components in the system, which are grouped into four major categories: Career Guidance Program Support Information, Career Guidance Program Process, Career Guidance and Counseling for Group and Individuals, and Career Guidance Program Support Functions. Brief descriptions of each of these categories and the components they contain are presented in the following paragraphs to provide an idea of the contents of each component.

Career Guidance Program Support Information. Component 1, State of the Art Review: A review of the critical elements of rural environments which require attention in program development and descriptions of aspects of comprehensive career guidance and counseling programs. *Component 2, Life Role Development Model:* An outline of a systematic approach for the development of a comprehensive program and a description of an outcome model outlining the domains of human growth and development for which the

program is responsible, including self and interpersonal relations, career planning and decision making, and life role assumption. **Component 3, Career Guidance Resources:** Abstracts of printed, audiovisual, and manipulative career development materials as well as abstracts of career development programs in rural areas.

Career Guidance Program Process. **Component 4, Planning and Implementation:** A coordinator's guide on how to organize and manage planning committees. **Component 5, Career Development Needs Assessment:** Procedures for planning and conducting needs assessment. **Component 6, Behavioral Objectives:** Guidelines for writing behavioral objectives as well as training procedures to teach individuals to write behavioral objectives. **Component 7, Resource Assessment:** Procedures on how to conduct local resource assessment and categorize resource information. **Component 8, Deciding Via Evaluation:** Procedures for developing and implementing an evaluation plan and guidelines on how to use evaluation data.

Career Guidance and Counseling for Groups and Individuals. **Component 9, Career Counseling in the Rural School:** Content and process for delivering individual counseling to students. **Component 10, Desk Reference:** Career information, a bibliography on counseling and counseling methods and career planning and placement materials. **Component 11, An Individualized Approach to Career Counseling and Placement:** A model for helping students in their next steps from school to education or work. **Component 12, Transitional Career Placement in the Rural School:** Descriptions of school-based placement activities. **Component 13, Career Guidance Practices:** Examples of career guidance practices in and out of school.

Career Guidance Program Support Functions. **Component 14, Staff Development:** Procedures for conducting and evaluating staff development workshops. **Component 15, Community Relations and Involvement:** Strategies on how to obtain community involvement. **Component 16, Rural Community Perspectives Towards Career Development:** Procedures for the assessment, communication and expansion of rural adult career values and attitudes affecting youth.

These 16 components of the cooperative rural career guidance system are contained in a set of 16 handbooks individually bound and grouped into four categories of related handbooks. They are

available from the National Center for Research in Vocational Education, 1960 Kenny Road, Columbus, Ohio 43210.

**Missouri Comprehensive Guidance
Program—University of Missouri-
Columbia**

The Missouri Comprehensive Guidance Program consists of three major components: a content model, a process model, and an implementation model. The model is current under development at the University of Missouri-Columbia. It is based on previous work at the University (Gysbers and Moore 1974) begun in 1971 as part of a U.S. Office of Education grant to assist each state, the District of Columbia and Puerto Rico to develop models or guides to implement career guidance, counseling and placement programs in local schools.

Content model. The content model identifies four interrelated knowledge and skill groups needed by individuals to live effectively: self-knowledge and interpersonal skills; life roles, settings and events, life career planning and basic studies and occupational preparation. In each of these groups example goals, developmental goals and competencies are identified. These developmental goals and competencies, sequenced by grade level along with competency indicators—ways of measuring individual performance to determine level of knowledge and skill mastery—form the content model. A view of human growth and development called "life career development" provides a perspective for the model.

Process model. Specific activities to assist individuals in mastering the competencies outlined in the Content Model are grouped into four major interrelated categories: curriculum-based processes, individual development-placement and follow-through processes, on-call responsive processes and systems support processes. An example of curriculum-based processes is the Missouri Guidance Curriculum which organizes and sequences goals, objectives and activities in modular form K-12. The three domains of self-knowledge and interpersonal skills, life roles, settings and events, and life career planning serve as the content of the curriculum. The next two categories of processes include activities to assist each individual to continuously monitor and understand their growth and development and take action on their next steps educationally and/or

occupationally through placement and follow-through and to receive direct and immediate assistance when needed. The final category, system support processes, includes those activities necessary to support the activities in the other three process categories such as staff development, community resource development and assessment.

Implementation model. The implementation model is based on an evaluation-based management system. Evaluation forms an integral part of the entire model. It involves four sequential and interrelated steps. The first step, planning, includes orientation activities for school and community, committee organization and needs assessment—desired outcomes and current status. The second step involves selecting appropriate goals, developmental goals, competencies to be developed in individuals and competencies indicators. The third step follows, matching guidance and counseling activities in each of the process model categories with the desired competencies in the content model. Included in this step is provision for those activities such as staff development located in the systems support category. The fourth step is installation. Here installation methods are described including time-task-talent charting and resource management procedures. Specific evaluation techniques also are described. Feedback loops are an integral part of the implementation model.

For information about the Missouri Comprehensive Guidance Program write to Norman C. Gysbers, or Earl J. Moore, at the University of Missouri, Columbia, Missouri 65201. For the Missouri Guidance Curriculum write to Instructional Materials Laboratory, Industrial Education Building, University of Missouri, Columbia, Missouri 65201. The curriculum contains 20 learning modules for teachers and counselors, plus two methods and processes guides.

A List of Selected Additional Practices

Career Guidance Programs: Booklet 1—Foundation for the Future, 1976; Booklet 2—Needs Assessment a Step in Program Planning, 1976; Booklet 3—Guidance Programs for Pupils with Handicapping Conditions, 1976; Booklet 4—Guidance Programs for Pupils in Occupational Education, 1977. Albany, New York: Bureau of Guidance, State Education Department.

- Dagley, J. C. and Hartley, D. L. *Career Guidance in Georgia: A Program Development Guide*. Atlanta: Guidance, Counseling, and Testing Unit, Georgia State Department of Education, 1976.
- Peterson, M. *Programmatic Approach to Guidance Excellence*. Charleston, Illinois: School of Education, Eastern Illinois University, 1977. (Now at the National Center for Research in Vocational Education, The Ohio State University, Columbus, Ohio.)
- River City High School Guidance Services: A Conceptual Model*. Iowa City, Iowa: American College Testing Program, 1975.
- Slater, M., Treichel, J. and Peterson, M. *Optimizing Planning Techniques for Comprehensive Systems of Guidance, Counseling, Placement, and Follow-Through*. (PROJECT) Urbana, Illinois: University of Illinois, 1977-78.
- Wellman, F. E. and Moore, E. J. *Pupil Personnel Services: A Handbook for Program Development and Evaluation*. Columbia, Missouri: Missouri Evaluation Projects, University of Missouri-Columbia, 1975.
- Wiggins, J. D. *Tested Practices: Organizing a School Counseling Program--The Priority-Career Counseling Program*. Washington, D.C.: National Vocational Guidance Association, 1974.

References

- Ashcraft, K. B. *A Report of the Invitational Conferences in Implementing Career Development Theory*. Washington, D.C.: National Vocational Guidance Association, 1966.
- Aubrey, R. E. "Misapplication of Therapy Models to School Counseling." *Personnel and Guidance Journal*, 48; 273-278, 1969.
- Borow, H. "Research in Vocational Development: Implications for the Vocational Aspects of Counselor Education." In C. McDanials, ed., *Vocational Aspects of Counselor Education*. Washington, D.C.: The George Washington University, 1966.

California State Department of Education. *Career Guidance: A California Model for Career Development, K-Adult*. December, 1971.

Campbell, R. E. "The Application of Systems Methodology to Career Development Programs." In Zalutano, S. D. and Sleeman, P. J., eds., *A Systems Approach to Learning Environments*. Roselle, New Jersey: Meded Projects, Inc., 1975.

Campbell, R. E.; Dworkin, E. P.; Jackson, D. P.; Hoeltzel, K. E.; Parsons, G. E.; and Lacey, D. W. *The Systems Approach: An Emerging Behavioral Model for Career Guidance*. Columbus, Ohio: The Center for Vocational and Technical Education, 1971.

Davis, H. V. *Frank Parsons: Prophet, Innovator, Counselor*. Carbondale: Southern Illinois University Press, 1969.

Drier, H. N., ed. *Guide to Integration of Career Development into Local Curriculum—Grades K-12*. Wisconsin Department of Public Instruction, December, 1971.

Glanz, E. C. "Emerging Concepts and Patterns of Guidance in American Education." *Personnel and Guidance Journal*, 40; 259-265, 1961.

Gysbers, N. C. and Moore, E. J., eds. *Career Guidance, Counseling and Placement: Elements of an Illustrative Program Guide*. Columbia, Missouri: University of Missouri, 1974.

Hosford, R. E. and Ryan, A. T. "Systems Design in the Development of Counseling and Guidance Programs." *Personnel and Guidance Journal*, 49; 221-230, 1970.

Hoyt, K. B. "Professional Preparation for Vocational Guidance." In E. Herr, ed., *Vocational Guidance and Human Development*. Boston: Houghton Mifflin, 1974.

Johnson, A. H. "Changing Conceptions of Vocational Guidance and Concomitant Value—Orientations 1920-1930" (Doctoral dissertation, Indiana State University, 1972) *Dissertation Abstracts International*.

- Jones, G. B.; Hamilton, J. A.; Ganschow, L. H.; Helliwell, C. B.; and Wolff, J. M. *Planning, Developing, and Field Testing Career Guidance Programs: A Manual and Report*. Palo Alto, California: American Institutes for Research, 1972.
- Jones, G. B.; Nelson, D. E.; Ganschow, L. H.; and Hamilton, J. A. *Development and Evaluation of a Comprehensive Career Guidance System*. Palo Alto, California: American Institutes for Research, 1971.
- Marland, S. P., Jr. Counselors an Indispensable Key. *The College Board News*. New York: College Entrance Examination Board, 6, September, 1977.
- Mathewson, R. H. *Guidance Policy and Practice* (3rd Ed.). New York: Harper and Row Publishers, 1962.
- Matthews, E. "Comment on Career Development." *Personnel and Guidance Journal*, 53; 652, 1975.
- McDaniel, H. B. *Youth Guidance Systems*. Palo Alto, California: College Examination Board, 1970.
- Parsons, F. *Choosing a Vocation*. Boston: Houghton Mifflin Company, 1909.
- Rudy, W. S. *Schools in an Age of Mass Culture*. Englewood Cliffs, New Jersey: Prentice-Hall, 1965.
- Ryan, T. A. "Systems Techniques for Programs of Counseling and Counselor Education." *Educational Technology*, 9; 7-17, 1969.
- Ryan, T. A. and Zeran, F. R. *Organization and Administration of Guidance Services*. Danville, Illinois: The Interstate Printers and Publishers, Inc., 1972.
- Sprinthall, N. A. *Guidance for Human Growth*. New York: Van Nostrand Reinhold Company, 1971.
- Tennyson, W. W.; Soldahl, T. A.; and Mueller, C. *The Teachers Role in Career Development*. Washington, D.C.: National Vocational Guidance Association, 1965.

- Tiedeman, D. V. and Field, F. C. "Guidance: The Science of Purposeful Action Applied through Education." *Harvard Educational Review*, 32, 483-501, 1962.
- Thoresen, C. E. "The Systems Approach and Counselor Education: Basic Features and Implications." *Counselor Education and Supervision*, 9, 3-17, 1969.
- Vetter, L. and Ransom, R. M. "An Analysis of Documents from State Departments of Education Relating to Comprehensive Career Guidance Programs and of Part C FY 1974 and FY 1975 Project Documents Relation to Guidance." Columbus, Ohio: The Center for Vocational Education, 1977.
- Wellman, F. E. *Contractor's Report, Phase I, National Study of Guidance*. Contract OEG-3-6-001147-1147. U.S. Office of Education, Department of Health, Education and Welfare, 1968.
- Wellman, F. E., and Twiford, D. D. *Guidance, Counseling and Testing: Program Evaluation*. Washington, D.C.: U.S. Department of Health, Education and Welfare, 1961.
- Zaccaria, J. S. "Developmental Guidance: A Concept in Transition." *The School Counselor*, 13, 226-229, 1966.
- _____. "Developmental Tasks: Implications for the Goals of Guidance." *Personnel and Guidance Journal*, 44, 372-375, 1965.

PART II

ALTERNATIVE PRACTICES FOR BUILDING COMPREHENSIVE CAREER GUIDANCE PROGRAMS

Chapters 2-7 present career guidance practices that can be used to build a comprehensive career guidance program as described in Chapter 1. Part III, Chapter 8, addresses the implementation of programs and practices.

The authors considered several ways of presenting Chapters 2-7, since there are different ways of organizing the career guidance domain. Out of concern for presenting practices in a useful way to the readers, the authors chose familiar and developmental categories of practices that are compatible with the theme of comprehensive career guidance programs. Also, by choosing to use categories of practices rather than, for example, constructing model, systematic programs that prescribed practices, the authors recognized that each school has unique needs and resources for building a comprehensive program.

Chapter 2 speaks to curriculum-based practices which represent a broad approach to delivering career guidance practices in the curriculum. Typically, curriculum-based practices are less than a coordinated comprehensive system, but greater than individual practices. Chapters 3-5 present individual practices that are geared, primarily, to one developmental area, for example, career exploration. Chapter 6 addresses the needs of women and special sub-populations in American society. Chapter 7, Computer-Based Career Guidance Practices, warranted special attention because of the unique requirements and capabilities of computers.

A national survey of career guidance practices yielded the materials included in Chapters 2-7. Availability was one criterion for including a practice. Another general criterion was that developed practices be dated from 1972, because practices used prior to 1973

were presented in *Career Guidance: A Handbook of Methods*, Campbell et al., Merrill Publishing Company, Columbus, Ohio, 1973.

Each chapter is a supermarket of ideas and materials for concocting a significant part of a comprehensive career guidance program. A chapter is organized in four parts for each category:

1. *Narrative.* The narrative supplies definition, a rationale for its use in the high school, a summary appraisal of practices and a full description of an illustrative practice.
2. *Abstracts.* Ten abstracts of practices are presented to acquaint the reader with the range and type of available practices for a given category.
3. *Additional Practices.* The additional practices section lists other relevant practices which the reader may want to investigate.
4. *References.* This part lists references found in the narration and additional readings that are germane to the category of practices.

Chapter 2

Career Guidance Curriculum Practices

What Are Career Guidance Curriculum Practices?

Tanner and Tanner (1975) in their intensive examination of curriculum, point out that over the years there have been many definitions of curriculum ranging from very broad to narrow. Some definitions have characterized curriculum as all learning opportunities provided by the school, whereas others have narrowed it to subject-centered courses of study. Tanner and Tanner (1975, p. 45) view curriculum as:

The planned and guided learning experiences and intended learning outcomes, formulated through the systematic reconstruction of knowledge and experience, under the auspices of the school, for the learner's continuous and willful growth in personal-social competence.

A more specific definition as it relates to a career guidance curriculum has been developed by Tennyson and Hansen (1971, p. 249):

Basically, a career guidance curriculum consists of an integrated, cross-disciplinary set of exposures and experiences at all grade levels to assist the student in acquiring self-knowledge and in experiencing the work world and career alternatives. It incorporates a variety of continuous learning activities appropriate to different stages of vocational maturity, and it creates an awareness among students and staff that many factors—people, experiences, and events—influence an individual's vocational development and his desire to accept responsibility for and have control over his own life. It sees the school as a microcosm of society and as a natural laboratory for developing healthy work attitudes.

To avoid confusion with other practices described in this handbook, curriculum practices differ from comprehensive guidance programs in that the latter operationally represent the total guidance program and include more than curriculum learning experiences. A comprehensive program incorporates a number of elements such as program planning and evaluation, administration, resource development, in-service training, placement, and follow-up. (See Chapter 1 for a more complete definition of a comprehensive program.)

Additionally, curriculum practices differ from other specific career guidance practices in that curriculum practices typically represent a sequenced series of classroom-based learning experiences which may cut across several career guidance domains, such as career awareness, exploration, and decision making. They are usually packaged as a set of integrated materials which require a series of activities coordinated by a team of teachers, librarians, counselors, specialists, and paraprofessionals to achieve their goals.

By contrast, other practices are more limited in their scope, are not necessarily classroom-based, and may represent only a single aspect of a career development domain. For example, learning how to interview for a job is only one aspect of the employability skills domain and could be taught either as a singular activity or as part of a larger curriculum strategy. The latter would probably consist of an integrated sequence of instruction on job adjustment, job finding, preparing resumes, test taking, completing application forms, and job interviewing.

Why Have Career Guidance Curriculum Practices in the School?

Guidance professionals have long recognized if they are to have effective programs of career guidance, the programs must be more fully integrated into the total school program. Psychologically separating guidance as an isolated function off to one corner of the school building loses considerable student impact. It reduces guidance to a hit-or-miss proposition. As Tennyson and Hansen have suggested, career guidance activities should be integrated to insure orderly career development.

An even more important reason for infusing guidance into the school curriculum is to promote the ultimate growth of the student,

i.e., to help the student see the interrelationship of a series of seemingly disjointed courses and their relevance for career planning. For example, the relevance of courses in social studies, math, chemistry, and English to each other as well as for future career planning. As one student commented, "Going through school seemed like a puzzling process of checkoffs—10 weeks of this to satisfy that requirement, and then 10 weeks of that without any real understanding of how it all hangs together. It's confusing."

Goldhammer (1972, p. 165), in his "blueprint for a careers curriculum," has stressed its applied value to students:

It would be deluding to think of careers curriculum as a panacea for all our educational ills in this century. It would also be deluding simply to reject the concept without carefully assessing its potential. If fully developed into an operating conceptualization of the curriculum, it has the potential for providing the flexible curriculum, adaptable to the needs of each youngster, and directed toward realistic goals, which conditions in our society require. It turns the emphasis to the curriculum away from the purely integrative and more toward the applicative dimensions. Knowledge is not an end in itself but a means to ends, a tool used by human beings and human society to achieve definite ends. The schools will still fail to meet all the needs of every child at times, but hopefully it will meet a much larger range of needs of more children than is presently the case.

Establishing career guidance as an integral part of the curriculum fosters a school-wide consciousness of the need for student career development and planning. It encourages a sense of shared responsibility among school staff for the futures of their students. A number of studies have shown that teachers are eager to perform a guidance role, for example, Campbell et al. (1968, p. 28), reported from their national survey of guidance that teachers see themselves assisting with a number of guidance functions: course selection, parent conferences, choosing an occupation, job placement, job adjustment, and gaining admission to post high school institutions.

Perhaps Herr and Cramer (1972, p. 316) capture the essence of this need by saying:

Increased attention to the importance of curriculum concerns must be given by the school counselor. The curriculum is a valuable means of fostering the broader concept of vocational maturity instead of the more restrictive concept of occupational choice. Curricular provisions have to be made to explore leisure activities, vocational interests, attitude development, and acquisition of knowledge and skills. It is also true that increased attention must be given to the instrumental relationship between vocational opportunities and academic content. While work is not losing its value, the value is apparently changing. Therefore, the total curriculum must support the individual's need to sort out the concepts of job, vocation, and leisure. The preparing of youth, both psychologically and mentally, to be receptive to retraining and continuous education throughout adulthood is yet another problem that can be partially, if not totally, attacked via the curriculum.

An Overview of Current Practices

Infusing career guidance into the curriculum has been slow. Both the American Vocational Association and the American Personnel and Guidance Association have been promoting it since the early sixties. Roeber (1965), in his "exploratory discussion" of the school curriculum and vocational development, suggested that "somehow teachers have to become overly committed to doing something about career development."

Perhaps Roeber's choice of words "somehow" and "something" were clues to the state of affairs at that time. Shortly thereafter, a national invitational conference was held at the Airlie House in Warrenton, Virginia to initiate a movement in this direction. The conference was entitled "Implementing Career Development Theory and Research Through the Curriculum," and attracted many experts representing a range of disciplines. Although the conference stimulated national awareness, not much large-scale curriculum activity occurred until the advent of career education in the early seventies.

In the interim, a great wealth of guidance curriculum materials have been generated by state and local education agencies, the U.S.

Department of Labor, the U.S. Office of Education, professional associations and commercial publishers. The curriculum materials span the entire spectrum of career development, but the bulk of the materials appear to be concentrated on career awareness and exploration. An interested teacher has a voluminous cafeteria from which to choose. Most of the materials come in the form of kits or packages including teacher guides, audiovisuals, student exercises, student handouts and group discussion questions. The materials range in length from one or two class periods to weeks, and in price from \$2.50 to almost \$1,000.

What to Consider When Installing Career Guidance Curriculum Practices

To facilitate the installation of career guidance curriculum practices, certain guidelines should be considered, such as the counselor's role as a consultant, the teacher's role, individualized counseling to student, resource development, etc. Each of these will be discussed briefly below:

1. *The counselor's role as a curriculum consultant.* Since teachers have limited knowledge of career development and counseling, the counselor needs to assume an active role as a consultant to the faculty. Teachers who are eager to take part in guidance will raise many practical questions such as: What should be taught? How do I obtain materials? How much time should be scheduled? How do I handle student questions which are beyond my expertise? Can I justify the material as part of my course? To deal with these concerns, the counselor should organize a series of group and individual meetings with the teachers to outline a plan of action. Additional individual consultations will be needed as the teachers implement their plans.
2. *Teacher's role.* The teacher is the key person for the successful infusion of guidance practices into the curriculum since, in most instances, the teacher will be responsible for providing the classroom-based activities. Consequently, the teacher's willingness to participate is essential. This fact is emphasized by Herr and Cramer (1972, p. 319):

Essentially, all the thoughts in this section thus far have been expressed more fully in the separate chapters on specific educational levels. However, there is one point which has not had sufficient attention. This is the matter of teacher attitudes as reflected in the behavioral models students are required to emulate and the levels of encouragement students are provided. Research data exist (Wately 1966) which suggest that teachers, and counselors also, sometimes de-emphasized factors that should be considered carefully in vocational development, or more important, encourage students who meet particular stereotypes of social desirability and withhold such encouragement from other studies not so endowed even when these students have equal ability.

Through preparation, supervision, and in-service experiences, every teacher must be helped to remain conscious of the fact that what he says and does will have significant influence on student behavior. The teacher must consider himself as a point of reference, and a role model for each student. How teachers respond to students will affect the attitude of the individual student to the educational process, to his own worth, to vocational attitudes, and to life itself.

The recent generation of subject-matter relevant to guidance activities which can be easily woven into traditional courses can facilitate the teacher's role. For example, materials are available for teaching personal economics in courses such as home economics or social studies, for preparing job resumes and job applications through English and journalism, as well as for alerting students to careers in most subject-matter areas. Additionally, it should be kept in mind that the teacher need not be restricted to prepared materials. In many instances, the teacher might find it desirable to develop original materials to fit a particular program of instruction.

When asked, most teachers respond favorably and exert a great deal of effort to provide first-rate guidance learning experiences. For example, during a recent field test of the Career Planning Support System (Campbell et al. 1977), an innovative career guidance system, teachers from 38 high schools developed and implemented over 500 classroom career guidance units. The units covered a wide range of career development domains such as exploration, job adjustment, job seeking, and planning.

3. *Individualized counseling to students.* Although classroom-based career guidance can go a long way in assisting in career development, it should not be perceived as a panacea. It is mandatory that individual counseling be available to students in concert with classroom activities. In fact, it is very likely that because of classroom stimulation, students will become more sensitive to their career planning and seek more individual help. Therefore, adequate provisions should be made to handle the counseling load.
4. *Utilizing community resources.* The efficient utilization of local resources for career guidance is a must. As Goldhammer (1972, p. 167) has aptly advised:

The school must become a part of the community, the the community must become a part of the school. School resources and community agencies must be employed in coordinated fashion to maximize the development of the potentialities of our children and youth. New forms of mutual employment of resources and coordinating and governing structures must be developed.

Typically, a large range of resources can be identified in the community which can greatly alleviate tight school budgets and extend faculty expertise, such as occupational literature, plant visits, speakers from trade and professional associations, and community agencies. A knowledgeable speaker or a realistic field trip adds considerable credibility to conventional classroom materials.

5. *Varied instructional techniques.* Students quickly become bored by sameness. Providing novelty and variety in the use of instructional techniques should help to reduce this. The practices which are cited throughout this book demonstrate a useful range of techniques. They include the use of computers, games, field trips, lectures, career resource centers, libraries, audiovisuals, problem solving, case studies, independent study, handouts, tests, commercially-prepared classroom packages, student logs and workbooks, group projects, mini-seminars, and workshops.
6. *Coordination of practices.* If a number of practices are going to be infused into the curriculum, these should be coordinated to avoid duplication and to optimize use of resources. Additionally, thought should be given to the sequential infusion of diverse practices to achieve a meaningful program for students. A disorganized program is doomed to fail. For example, if a number of teachers concurrently decide to offer a unit for job interviewing, the student may get an overdose of job interviewing and little or nothing of some other important area. The problem could be further compounded by conflicting demands for scheduling the same resources such as materials, audiovisuals and outside speakers. To circumvent these dilemmas, a management plan should be developed to insure (a) balanced coverage of content, (b) proper sequencing of activities, (c) judicious use of resources, and (d) relevance to student needs.

The Career Planning Support System (CPSS), mentioned earlier, has developed such a plan as a part of its overall system which is intended to be used by the career guidance director. The CPSS plan incorporates consideration for the items listed above as well as other considerations, for example, selecting curriculum infusion points, orienting teachers, and monitoring implementation. Also, the plan is sensitive to student needs in that the selection of practices is based on a previous needs assessment. The CPSS plan is just one illustrative management technique. Others are probably available too. Regardless of what technique is used, the important thing to remember is that successful implementation requires a coordinated plan.

7. **Evaluation.** Evaluation in this context is concerned with assessing (or determining) the degree to which a curriculum practice achieves its intended goal. Although most teachers and counselors shy away from this process and see it as "frosting on the cake," evaluation can provide useful information and help to eliminate problems if the practice is repeated or if an alternative practice is substituted. Evaluation is directed to answer questions in several areas. (1) *Student learning.* Did students learn what they were supposed to learn from this practice? In the case of job interviewing, are you satisfied that they can successfully interview given the opportunity? Usually this can be assessed through a variety of alternative techniques such as written tests, role-playing, or an actual job interview. (2) *Resources.* Were the resources (people, equipment, space, and materials) adequate to implement this practice? If there was a problem, can it be corrected in the future? Can other resources be utilized to either correct or improve the unit? Most of this information is easily obtained through direct observations and/or critique sessions with the students.

An Illustration of a Career Guidance Curriculum Practice

The Career Decision-Making (CDM) Program was selected to illustrate a curriculum practice, since it best captures the most desirable features of this type of practice. The CDM Program has been carefully developed and field tested for practical implementation in schools. It employs an interesting variety of instructional techniques to achieve student objectives across several career development domains. Although the program encourages school-wide participation as a core program, it also permits flexibility through incremental installation. Additionally, the program fosters the establishment of an overall organizational plan which facilitates the coordination of multiple resources, for example, teachers, counselors, published materials, and the community.

Title: The Career Decision-Making Program

Developer: David Winefordner, Project Director, The Appalachia
Educational Laboratory, Inc., (AEL), Charleston,

West Virginia, under a research grant with the National Institute of Education (NIE).

Publisher: McKnight Publishing Company, Bloomington, Illinois 61701 (available, 1977-1978)

Cost: \$1,365.85 for the complete program.

Purpose: The Career Decision-Making Program is centered on the idea that career guidance must be concerned with the whole person in the context of society, and not solely with occupational choice. Education, family, values, government, and community involvement are vital parts of a person's total career lifestyle. It is as important for students to learn how to choose (how to make decisions) as it is for them to learn about their available choices.

Through this total program, students:

1. Identify career activities, values, and life goals, and recognize that career is one means of moving toward life goals
2. Use self-exploration and occupational exploration in shaping careers
3. Develop decision-making abilities
4. Relate personal characteristics to occupations in order to identify and/or evaluate career alternatives
5. Identify major influences affecting career decisions
6. Identify ways in which society and self interact through career
7. Develop their ability to manage the variables involved in shaping their careers

The Career Decision-Making Program consists of two major components, The Career Information System (CIS) and Exploring Career Decision-Making (ECDM) which can be used as independent components or together as a core comprehensive program.

Description of Components

The Career Information System (CIS) is a means of organizing, indexing, and filing career information resources, regardless of format, into a flexible system. Students can use the system and gain access to resources for personalized career exploration. Materials include

1. Worker Trait Group Keysort Deck—a deck of keysort cards with one card representing each worker trait group. Students can find worker trait group(s) that involve their expressed interests, abilities, preferred work activities, desired work situation—or any combination of these factors.
2. CIS Filmstrips—provide a basic orientation to the CIS and to basic concepts about interests, aptitudes, and other factors used for helping students develop self-understanding. Nine filmstrips with cassettes.
3. CIS Guide—contains basic information about the CIS materials and how to use the system for career exploration.
4. Individualized Activities for Career Exploration—a consumable booklet containing checklists and other materials for students to identify their interests, aptitudes, goals, etc. They use this information to identify related worker trait groups for career exploration.
5. Checklists—the checklists for identifying interests in work activities and work situations from the Individualized Activities for Career Exploration Booklet are also available separately. They may be used on an individual basis or as separate elements in classroom or other activities.
6. Worker Trait Group Guide—the Worker Trait Group descriptions from the DOT—rewritten at an 8th grade

vocabulary and readability level as well as in a format more appropriate for secondary school students.

7. **School Subject Occupation Index**—guidebook for relating school subjects to occupations and industries.
8. **School Subject-Worker Trait Group Chart**—a 25" x 38" chart used to identify Worker Trait Groups which relate to which school subjects and vice versa.
9. **Worker Trait Group Index to Occupational Information**—a listing of widely used occupational information indexed to Worker Trait Groups such as the *Occupational Outlook Handbook* and the *Encyclopedia of Careers*.
10. **Preprinted File Cards**—3" x 5" file cards drilled and die-cut to fit library card drawers and Rolodex. Card format is printed to provide for inserting job title, Worker Trait Group number, DOT code number, file location of material, *Occupational Outlook Handbook* page, *Encyclopedia of Careers* page, reference checks and codes for local resources such as field trips or persons students may interview.
11. **Worker Trait Group File Content Notebook**—preprinted forms to prepare a Worker Trait Group Index to the main DOT job titles of materials contained in a school's Worker Trait Group Filing System. It has dividers and preprinted forms for each of the Worker Trait Groups.
12. **CIS Professional Manual**—a description of how to set up and maintain an occupational information filing and indexing system structured on the Worker Trait Group Arrangement of the DOT. It also contains directions for using CIS materials in group guidance sessions or for individualized career exploration.

Exploring Career Decision-Making (ECDM) consists of 15 career guidance units that are appropriate for a course or can be used individually. The teacher/counselor uses the materials in a group or class setting to help students gain a better understanding of themselves and the world of work, and to assist them to develop systematic exploration and decision-making skills. Materials include:

1. Exploring Career Decision-Making—Textbook.
2. Activity Booklet for Exploring Career Decision-Making—this workbook contains directions and response blanks for student activities. It also provides three charts on which students record the information they gather about their personal occupational opportunities.
3. Professional Guide for Exploring Career Decision-Making—information for the teacher/counselor on how the guidance units are managed.
4. Filmstrip Package—nine filmstrips with 5 cassettes.
5. Worker Trait Group Guide.

Selected units can be used in nine-week, or shorter, periods. Students gain a better understanding of themselves and the world of work. They become aware of their achievements and their potential and they are able to better comprehend and appreciate their future roles in our society. Students develop career exploration and decision-making skills. Although the text is structured for group use, the subject matter is the student's unique interests, aptitudes and experiences.

Unit Descriptions

- Unit 1 — *Career Awareness* introduces the concept of work (productive effort—paid or unpaid) as a means of life goals. Students identify their personal goals, examine the components of career and project potential career activities.
- Unit 2 — *Decision-Making* helps students become aware of the kinds of decisions they face and assists them in learning and using a decision-making strategy.
- Unit 3 — *Self-Exploration* introduces self-exploration as an on-going process and a vital part of career exploration. Students examine themselves from three perspectives: the internal (how I see me),

the external (how others see me) and the ideal (the person I want to become).

- Unit 4 – *Occupational Exploration* presents the process of locating and evaluating occupational information and how to critique it for accuracy, completeness, bias and stereotyping. Students are also introduced to the Career Information System as a source for occupational information or to the cataloging system of their career resource center.
- Unit 5 – *Interests* centers on the identification and development of personal interests. Students explore occupations chosen on the basis of preferred interest areas.
- Unit 6 – *Work Activities* orients students to the basic type of work activities. Students identify their preferences and explore related groups of occupations.
- Unit 7 – *Work Situations* introduces the types of situations to which workers must adapt. Students identify their preferences and explore related groups of occupations.
- Unit 8 – *Credentials and Competencies* helps students relate school activities and subjects to the requirements—formal, legal, and functional—of career activities and occupations.
- Unit 9 – *Aptitudes and Physical Demands* presents the concept of aptitude as the quickness and ease with which one can learn to do something. Students examine their own aptitudes and relate them to the aptitudes of their preferred groups of occupations. They also examine the physical demands of these occupations.
- Unit 10 – *Working* presents the concept of the work setting as an interaction of the worker with his or her physical and social surroundings. A game is used to reinforce these concepts.

- Unit 11 — *Career Activities* helps students identify desired career activities on the basis of interests and experiences. They arrange them in different occupational/nonoccupational patterns which demonstrate a variety of ways to achieve a satisfying career.
- Unit 12 — *Economic Influences* presents major economic concepts affecting occupational activity and lifestyle. Students compute the income necessary for their preferred lifestyles and identify the resources necessary and available through their career activities.
- Unit 13 — *Social and Family Influences* helps students become more conscious of the family and social factors that influence their career decisions.
- Unit 14 — *Career Planning* helps students formulate a tentative career plan through which they can meet their goals. This plan includes alternate routes to their goals.
- Unit 15 — *Your Future* helps students build skills in applying and interviewing for jobs. Finally, the students, re-examine their career plans in the light of a rapidly changing world.

Additional filmstrips are available which present important concepts and highlight the Career Decision-Making Program as follows:

Item 2713 Career Goals. Introduction to the common needs of people and yet the individual goals or tastes of each person. Short term goals, long term goals, influences on these goals, how goals change as a person matures are among topics covered. How individuals can meet their goals through work—from early childhood to old age—completes the filmstrip. \$18.00.

Item 2712 Creating a Career. Career is defined as all work activities used to meet goals—not just paid jobs. It includes education and training occupations, home and family and community involvement. Decisions shape a career, affecting how and where

one's time is spent, and with whom. They also affect standard of living. By making decisions which lead toward their goals, students gain control over their career. An award winner. \$18.00.

Item 2714 Decision-Making, Part 1. This follows George (a teen) through a carnival to a fortune teller who has George see in a crystal ball how different people make decisions. She then tells him about a decision-making strategy which is demonstrated by Penny (another teen). \$18.00.

Item 2715 Decision-Making, Part 2. The fortune teller explains the decision-making strategy in detail to Sally (a teen) by allowing her to see her own and other people's decisions in a crystal ball. \$18.00.

Item 2727 Sequences in Self-Exploration. This filmstrip is first viewed with *no narrative*, only music and visuals. There are four situations presented. The viewers are to record their impressions of what is happening in these situations and how the people in them feel. The strip is shown again with narrative to the four situations. Discussion is used to show people have different feelings, values, and attitudes. \$18.00.

Item 2716 Self-Exploration: Who Will I Be? A young boy is confronted by masked figures representing the Values of Truth, Beauty, Justice, and Love. He is left with the decision as to what he values.

Item 2716 Self-Exploration: Who Will I Be? (Continued). A young boy is projected into mirror images of himself in various roles—student, actor, computer technologists, and older retired man. He is left thinking of all the choices he could make for his future. \$18.00.

Item 2828 Introduction to the Career Information System. This strip stresses that information is needed to make satisfying decisions. That information must be organized—examples are libraries, phone book, etc. To make career decisions, students need both self and occupational information. The Career Information System provides this link from self information (interests, values, goals, abilities) to occupational information through such sources as the *Dictionary of Occupational Titles* (Worker

Trait Groups), *Occupational Outlook Handbook*, and the *Encyclopedia of Careers*.

Item 2797 Using the Career Information System. This strip gives specific directions for using the Career Information System. It follows a couple of students as they investigate and explore occupations using the system's interest/aptitude checklists and the Worker Trait Group Guide. \$18.00.

Item 2718 Work Activities. This strip outlines with audio-visuals the 10 types of Work Activities. Very diversified occupations shown. Student is shown that for a given type of activity, there are occupations which require similar activities. \$18.00.

Item 2720 Work Situations. This follows Mike (black, male teen) and Susan (black, female teen) as they discover how attitudes and work situations can influence performance on a job. Susan's dislike of rules and Mike's dissatisfaction with routine are points brought out to teach adaptive skills. The varying situations workers face are demonstrated by people in varying occupations. \$18.00.

Item 2721 Credentials and Competencies: Get Ready, Get Set, Go! An award-winning filmstrip. It depicts the need people have for credentials (what you should be able to do) for many purposes, including getting a job. Competencies (what you can do) are presented as job-seeking skills. How to develop these skills is outlined. \$18.00.

Item 2722 What are Aptitudes? People are different. Achievement (what you have done), Ability (what you can do), and Aptitude (what you can learn to do) are the past, present, and future of the same characteristic. The filmstrip describes how Dave's (white, male teen) knowledge of his achievement, ability and aptitudes both in and out of school, can help him in his career decision-making. It then uses various students and their interests and school aptitudes to show how these influence their futures. \$18.00.

Item 2723 Learning about Aptitudes. This covers areas of aptitudes and how they relate to career decisions. These areas are: General, Verbal, Numerical, Spatial, Form Perception, Clerical

Perception, Motor Coordination, Finger Dexterity, Manual Dexterity, Eye-Hand-Foot Coordination and Color Discrimination. By identifying their own aptitudes in these areas, students can relate them to career choices. \$18.00.

Item 2719 Working Conditions and Physical Demands. This filmstrip presents the varying work environments (indoor/outdoor, hot/cold, etc.), physical action (standing/crawling/kneeling, etc.), and conditions (dusty/toxic/noisy) through representative occupations. \$18.00.

Item 2724 Work Experiences. Students discuss their plans for summer activities. Individuals relate the reasons for doing particular activities and how they might affect their futures. This unit also stresses their interests and values. \$18.00.

Item 2725 Economic Influences. The cost of living, earnings of individuals and families, taxes, strikes, recessions, inflation are shown as influences on each person's lifestyle and career. How economics might affect the decision the students make about their future include the cost of education, training, marriage, etc. Highlights breaking down occupational stereotyping. \$18.00.

Item 2726 Social Influences. A brief look at past social influences is followed by the widening choice of occupations open to all people. Looks at how family, peer groups, sex, ethnic background, and handicaps, influence career decisions. Three youths (urban Spanish/American male, suburbanite, white female, and rural, white male) discuss the decisions they must make and how their families and social background influence them. \$18.00.

Abstracts of Selected Practices

American College Testing Program. *Career Planning Program, Grades 8-11.* Boston: Houghton-Mifflin Co., 1974. (ED 109 362)

This program was developed by the Research and Development Division of the American College Testing Program for students in grades 8-11. The materials include a student guidebook covering self-assessment steps in career planning; an ability

measurement covering students' aptitudes in mechanical reasoning, numerical, reading, language, and clerical skills; an answer folder for the test; a student report showing ability, interest and experience measures; and a user's guide describing the program, testing and scoring. The program is for individual or class use and could be used more than once.

Cost: \$3.00/Handbook

Belman, Harry and Shertzer, Bruce. *My Career Guidebook*, 2nd Edition. Riverside, New Jersey: Bruce Publishing Co., 1974.

This student workbook, revised by students, teachers and counselors, is designed to help students plan orderly and intelligently for their careers. Part I assists students in analyzing their qualities by evaluating scholastic achievement, abilities and vocational interests, health and physical characteristics, real and ideal self and post-high school plans. Part II helps students gather information about occupations in which they are interested by evaluating the nature of work activities, kinds of occupations, trends in the U.S. labor force and interviewing employers. This program may be used by the student individually and in group-guidance courses, homerooms, orientation programs, and vocation classes.

Campbell, David E. *If You Don't Know Where You're Going, You'll Probably End Up Somewhere Else*. Niles, Illinois: Argus Communications, 1974.

This program consists of an illustrated paperback and 10 spirit masters designed to help junior and senior high school students evaluate their talents and weaknesses and develop options in career choices. Topics of the spirit masters are: adult interview form, occupational map, a personal perspective of the work world, skill sheet, and life clock.

Cost: \$1.95/paperback, \$6.50/total set

Harmon, Marv (Coordinator). *Career Guidance Techniques for Classroom Teachers: Individualized Learning Systems*. Salem, Oregon: Oregon Department of Education, 1975. (ED 133 524 - ED 133 531) A cooperative project of the states of Alaska, Idaho, Oregon, and Washington.

This package of eight career guidance workbooks is designed to assist teachers in the career development of their students. The competency areas: valuing, decision-making, life-style, community resources, working relationships, occupational information, parental involvement and tests, are designed to give students a better understanding of themselves and provide information on improving their career decision-making skills. The material should also help students improve their confidence and determine the resources they need to achieve multiple goals.

Cost: \$1.67 per workbook

Homes and Lifestyles: *The Choice is Yours*. New York: Guidance Associates, 1976.

This program, which consists of five, full-color filmstrips, five, 12" long-playing records or five cassettes and a teacher's guide, is designed to help high school students make rational decisions about their life-styles. Part I depicts various living situations. Part II examines family relationships. Part III reviews effective decision-making. Part IV shows alternative housing. Part V examines day-to-day home management tasks.

Cost: \$99.50

J. C. Penney Co., *Career Development: Education for Living*. New York: J. C. Penney Educational Relations, 1974.

This kit includes a filmstrip and cassette, a copy of the script, discussion suggestions, overhead transparencies for a case study, picture cards, student action awareness cards and a teacher's guide. The materials are designed to prepare the individual to make career decisions, stressing the need to combine self-awareness and career awareness through home, classroom and community experiences. The materials help explore individual values, attitudes, aptitudes and skills and work opportunities, requirements and satisfactions.

Cost: \$14.50

Mafex Associates, Inc. *Career Directions: Staying with It and Getting Ahead*. Johnstown, Pennsylvania: Mafex, 1974.

This is a kit of 30 student reading and activity workbooks, two cassettes, two filmstrips, and a teacher's manual. The materials help students define career goals and expectations and develop guidelines and perspectives for achieving goals. The kit is for junior and senior high school students, but the instructor should review the student's reading level before recommending the materials for individual study. The kit contains a series of filmed interviews with people employed in various jobs and suggestions for using the materials in existing curriculums and student follow-up activities.

Cost: \$111.95

Rettig, Jack L. *Careers: Exploration and Decision*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1974.

This 120-page paperback discusses different ways people choose an occupation, the importance of knowing oneself, how to choose an occupation and making a living. This book is for junior and senior high school students to use individually in making a career choice. There is also a teacher's guide which explains the outline of each of the 11 chapters.

Cost: \$2.40

Science Research Associates. *The Career Development Program*. Palo Alto, California: College Division, 1976.

This program assists individuals in grades 8-adult understand themselves, their career needs and their capabilities. Two major parts of the program, the career planning notebook (covering self-assessment, career investigation and decision-making) and the career development theory (covering a student's school and leisure experiences, attitudes, plans and achievements) can be used together or independently as a complete guidance program. There is also information on how to administer the program and how the student can interpret a profile for educational and career planning.

Cost: Available from publisher

Walz, Garry R., and Benjamin, Libby. *The Life Career Development System*. Ann Arbor, Michigan: Human Development Services, Inc., 1975.

The Life Career Development System is an action-oriented comprehensive 60-hour program with six components: 30 copies of each of nine modules dealing with self, values, goal-setting, overcoming barriers, futurism, and other aspects of life career development, sequentially organized reusable, and including games, pictures, and text; a Facilitator's Resource Bank; pre/post learning measures; participants' journals; user communication network; and a facilitator training workshop. The LCDS is in use in secondary schools, colleges, and agencies, and can be easily customized to various settings and time allocations. Appropriate for groups of up to 30 from grades 9-adult, the LCDS is designed to help participants master the essentials of life planning and decision-making.

Cost: Variable according to quantities needed

A List of Additional Practices

Abt Associates, Inc. *Sex Fairness in Career Guidance: A Learning Kit*. Cambridge, Massachusetts: Abt Associates, Inc., 1975.
Cost: \$15.00; shipping and handling, \$1.50.

Addison-Wesley Publishing Company, Inc. *Hello World! A Career Exploration Program*. California: Addison-Wesley Publishing Company, Inc., 1973.

Appalachia Educational Laboratory, Inc. *Exploring Careers through Occupational Situations*. Charleston, West Virginia: Appalachia Educational Laboratory, Inc., 1976.

- Agency for Instructional Television. *Bread and Butterflies*. Bloomington, Indiana: Agency for Instructional Television, 1974.

Argus Communications. *Making Sense of Our Lives*. Niles, Illinois: Argus Communications, 1975. Cost: \$8.00/each value cassette, \$22.00/all three value cassettes; \$1.00/each value sheet spirit master; \$1.50/each value sheet pad; \$15.00/set of process posters.

Benson, Arland A. *Resource Guide for Career Development in the Senior High School*. St. Paul, Minnesota: Minnesota Department of Education, Pupil Personnel Services Section, 1973.

Bowlsbey, JoAnn Harris et al. *Structure and Technology for Facilitating Human Development through Career Education*. Washington, D.C.: National Institute of Education, 1975.

Educational Progress. *The Career Game*. Tulsa, Oklahoma: Educational Progress, 1975. Cost: \$97.50.

Eye Gate House, Inc., The. *ABC's of Getting and Keeping a Job*. Jamaica, New York: The Eye Gate House, Inc. Cost: Total set, \$79.50, each filmstrip, \$7.50, each cassette, \$5.95.

Finn, Peter, and Lawson, Jane. *Career Education Activities for Subject Area Teachers. Grades 9 through 12*. Cambridge, Massachusetts: Abt Associates, Inc., 1975.

Gelatt, H. B. et al. *Decisions and Outcomes*. New York: College Entrance Examination Board, 1973.

Gregg. *Career Core Competencies: A Cooperative Work Experience Program*. New York: Gregg, 1977.

Guidance Associates. *Career Choice: A Lifelong Process*. New York: Guidance Associates, 1976. Cost: \$48.50.

_____. *Careers and Lifestyles*. New York: Guidance Associates, 1974.

_____. *Changing Work Ethic*. New York: Guidance Associates, 1973. Cost: \$48.50.

_____. *Making the Most of Your Talents*. New York: Guidance Associates, 1976.

Hackettstown High School. *Work Ed: World of Related Knowledge and Educational Development*. Hackettstown, New Jersey: Hackettstown High School, 1975. Cost: \$7.50.

Hampson, David H. et al. *Models of Career Education Program: Work Experience, Career Guidance, Placement, and Curriculum*. Washington, D.C.: National Institute of Education, 1975.

Hansen, Lorraine et al. *Life Styles and Work*. St. Paul, Minnesota: Minnesota Department of Education, Pupil Personnel Services Section, 1972.

- Henny, R. L. *Systems 3: Career Advancement Series*. Chicago: Follett Publishing Company, 1975.
- Holup, John. *Multi-Occupations Curriculum Guide*. Moscow, Idaho: Idaho University, College of Education, 1976. ED 136 059.
- Idaho State Department of Education. *Career Development. A Course of Study Recommended for Ninth Grade*. Boise, Idaho: Idaho State Department of Education, 1972.
- Kyle, James et al. *The Student Guide for Career Analysis: Community Involvement/Career Education: An Experience-Based Social Studies Program. Volume 1*. St. Paul, Minnesota: Minnesota State Department of Education, Division of Vocational and Technical Education, 1974.
- Leonard, George E., and Vriend, Thelma J. Update: The Developmental Career Guidance Project. *Personnel and Guidance Journal*, 53, 9, 1975.
- Lorain City Schools. *Career Education Orientation and Exploration Curriculum Guide (Grades 7-10)*. Lorain, Ohio: Lorain City Schools, 1973.
- Louisiana State Department of Education. *Career Education Resource Guide for Chemistry*. Baton Rouge, Louisiana: Louisiana State Department of Education, 1974.
- Minnesota Department of Education. *Satisfactions and Rewards of Work: A Career Education Resource Guide*. St. Paul, Minnesota: Minnesota Department of Education, Pupil Personnel Services Section, 1972.
- National Institute of Education. (DHEW). *The Community is the Teacher: Experience-Based Career Education*. Washington, D.C.: National Institute of Education, 1975.
- Northeast Wisconsin Technical Institute. *Career Profile Directory*. Green Bay, Wisconsin: Northeast Wisconsin Technical Institute, 1978.
- Oklahoma State Department of Education. *A Guide for Developmental Vocational Guidance*. Stillwater, Oklahoma: The

Oklahoma State Department of Education, Department of Vocational and Technical Education, 1973.

Pastrana, Ronald R. *Career Education Project: Resource and Instructional Manual for the Implementation of a Model Career Guidance Curriculum Unit*. Dix Hills, New York: Suffolk County Board of Cooperative Educational Services, 1973.

Portland Public Schools. *PCE/K-10 Activities for Career Education*. Portland, Oregon: Portland Public Schools, Oregon Area II Office, 1974.

Research for Better Schools, Inc. *Experience-Based Career Education*. Philadelphia, Pennsylvania: Research for Better Schools, Inc., 1975.

Richmond, George. *Micro-Economy*. New York: Harcourt Brace Jovanovich, Inc., 1973. Cost: \$39.00; Teachers manual (separately) \$6.00.

Ryan, Antoinette T. *Hawaii Career Development Continuum: Curriculum Guide 10-12*. Honolulu, Hawaii: Hawaii Department of Education, 1974.

Scholastic Book Services. *Discovery*. Englewood Cliffs, New Jersey: Scholastic Book Services, 1974. Cost: \$169.50.

Simington, G. *Getting Started: A Guide to Writing Your Own Curriculum*. Lewisburg, Pennsylvania: Central Susquehanna Intermediate Unit, 1976. Cost: \$45.00.

Studd, Dave. *The Career Development Course—Two Years of Experience*. School Guidance Worker, 31, 5, 1976.

Stutz, Gerald O. *Career Development—Goals and Activities Booklet*. Potlatch, Idaho: Potlatch School District No. 295, 1975. Cost: \$6.00.

Vetter, Louise and Sethney, Barbara J. *Planning Ahead for the World of Work: Student Materials*. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1971 (revised 1975).

References

- Ashcraft, K. B. ed. *Implementing Career Development Theory and Research through the Curriculum*. Conference Report. Washington, D.C.: American Personnel and Guidance Association, 1966.
- Borow, H. ed. *Career Guidance for a New Age*. Boston: Houghton-Mifflin Company, 1973.
- Campbell, R. E. et al. *Vocational Guidance in Secondary Education: Results of a National Survey*. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1968.
- Campbell, R. E. et al. *The Career Planning Support System*. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1977.
- Goldhammer, K. "A Careers Curriculum." In Goldhammer, K., and Taylor, R. E. eds., *Career Education: Perspective and Promise*. Columbus, Ohio: Merrill Publishing Company, 1972.
- Herr, E. L., and Cramer, S. H. *Vocational Guidance and Career Development in the Schools: Toward a Systems Approach*. New York, New York: Houghton-Mifflin, 1972.
- Roeber, E. C. *The School Curriculum and Vocational Development*. Vocational Guidance Quarterly, 1965.
- Tanner, D., and Tanner, L. *Curriculum Development*. New York: Macmillan Publishing Company, Inc., 1975.
- Tennyson, W. W., and Hansen, L. S. "Guidance Through the Curriculum." In *The Encyclopedia of Education*, 4, 248-254, New York: Macmillan, 1971.

Chapter 3

Self-Understanding and Occupational Knowledge Practices

Work is a basic human activity that satisfies two needs. It satisfies the economic needs of society by perpetuating goods and services, and satisfies the individual by providing a means of economic support, social identification, prestige, and self-fulfillment (Calhoun and Finch, 1976). If an individual is going to function well in society, particularly American society, that person must know how and where individual needs can be met. This suggests knowing one's self and what work will bring satisfaction to self and society. Hoppock (1976) postulates that self-knowledge influences work choice by helping people understand their needs and wants, and occupational information helps people discover the work that must best satisfy their needs and wants.

This chapter addresses the roles self-understanding and occupational knowledge play in career development for high school youth. It also describes and lists appropriate activities that will assist students in becoming more knowledgeable about themselves and the world of work.

Part A
Self-Understanding Practices

What Are Self-Understanding Practices?

Perhaps the most important aspect of career development is self-concept. Learning about one's self is a lifelong, dynamic process. How a person acts reflects that person's self-concept. The basic theoretical premise of the role self-concept plays in career development is that careers are chosen to implement or express one's self-concept (Super 1953; Crites; Super et al. 1963). The notion of self-concept includes personal values and attitudes, some of which are related to the world of work, and are important in the selection of a career (Pietrofesa and Splete 1975).

Self-understanding practices are career guidance activities designed to encourage students to develop positive self-concepts and understand the relationship between their self-concept and possible careers. Also, self-understanding practices impart self-appraisal skills to students for future use. For example, knowing where to find and how to use a values clarification exercise may be very useful once a person finds work to be a boring, unsatisfying experience.

Self-understanding activities typically include:

- Interest and ability testing
- Attitudes and values clarification
- Experience and achievement identification
- Coping skills
- Decision-making and goal setting

Working with students to understand and cultivate positive self-concepts for career development is a major challenge to a comprehensive career guidance program.

Why Have Self-Understanding Practices in the School?

The self-concept undergoes testing and retesting throughout the career development process. It is a mutually affective process. Self-concept affects career choice. Career affects self-concept. But a seemingly critical period is adolescence or the high school years. This stage of life, according to Erickson (1976), is when youth experience the most difficulty identifying who they are and what their role is to be.

Super (1957 and 1963) wrote about the high school years as a time of crystallization of an occupational choice and evidence of a commitment to that choice through self-examination and role tryout. It is through expressing a vocational preference that students begin to say what kind of persons they are.

The risk of failing to develop self-understanding and positive self-concepts for career development among students would mean the loss of human energy effectively contributing to society.

An Overview of Current Practices

Until recently self-understanding practices were mostly available for use in the primary and middle grades. The number of practices for high school students is growing in the light of the career education movement and the popularity of self-analysis books and techniques on the mass market. Many of the practices available have been developed locally. Little evaluative data are available. Types of practices include self-exploration through books, self-administered assessment instruments, small group workshops and activity sessions, counselor and student sessions, films, filmstrips, and games. Self-understanding activities often are elements of practices which focus on other career development areas.

What to Consider When Installing Self-Understanding Practices

Self-understanding practices, as part of a comprehensive career guidance program, should be pervasive and continuously evaluated. In some way, all activities have to relate to the student's self-concept.

Persons qualified to evaluate self-understanding practices should do so before they are used with students. Once implemented, the same person(s) should monitor the effectiveness of practices.

The following is a basic checklist of questions to use before and during implementation of self-understanding practices.

- Has the practice been reviewed by a qualified person, for example, a school psychologist or counselor?
- Has the practice been assigned to the appropriate grade and age level?
- Has the practice been selected based on student needs?
- Is the practice reaching the student for whom it is intended?
- Are the people in charge of using a practice skilled to use it without creating harmful effects for students?
- Are the students benefiting from the practice?
- Are there new developments that require revising or eliminating practices?

An Illustration of a Self-Understanding Practice

The Career Motivation Program is a series of group process workshops designed to help individuals know themselves and their career world through specific activities which identify their successes, strengths, values, interests, attitudes, and personality patterns. The participant-leader manual uses a format of instruction, action, feedback, and graphics and illustrations to clarify each activity. A typical group consists of eight to 10 teenagers or adults. The materials are self-instructional. Workshops are available from the developers.

The participant-leader kit includes complete materials for 10 persons. It contains "Data-People-Things" cards and posters, four sets of 10 charts and six sets of sheets for evaluating interests, abilities, values, personality patterns, etc. Holland's six personality

types (realistic, investigative, artistic, conventional, enterprising, social) and the data, people, things scheme are used. All components are summarized on an individual's own summary chart, which is used to evaluate past, present, and future work environments. The aim is to clarify the degree of fulfillment expected by each person in a given situation, in order to find a "best fit."

The strength of the program lies in its flexibility and in its integration of personal and career development in an experiential approach. In addition, the counselors, advisors, or faculty who become involved with the program, also become more involved with the students, both on an individual and small-group basis. The bonus for students in the workshop is the positive reinforcement of themselves as total persons and a stimulus for further meaningful counselor-client relationships. For information contact: Munson, Paul J., Garrison, Clifford, B., and Saunders, Jean D. *Career Motivation Program*. Career Growth Associates, Inc., 600 Glendale Drive, Richmond, Virginia 23229. (804) 642-1863. Cost: \$39.95.

Abstracts of Selected Practices

American Personnel and Guidance Association. *Improving Personal Relationships*. Parts I and II. Washington, D.C.: APGA, Film Department, 1977.

Improving Personal Relationships, Part I and Part II, and the Leader's Guide are intended for use by junior high and high school counselors, teachers and allied helping professionals who assist young women (and men) in improving their personal relationships.

The format of each film consists of an introductory roleplay sequence and a series of vignettes. The roleplay sequence depicts an interpersonal situation handled first non-assertively, second aggressively, and third assertively. The stimulus vignettes confront the viewer with a series of demanding and difficult situations which are similar to relationships with others. It is suggested that the stimulus vignettes be viewed and worked with one at a time. While these films are intended for use with an assertion training framework, the inclusion of general discussion issues about each vignette in the Leader's Guide expands their usage to discussion groups as well as assertion groups.

Cost: \$2.50 per part or \$25.00 per day of use, per part on a rental basis.

Brandt, Ruth Ann (Coordinator). PA Guidance Service Center. Harrisburg, Pennsylvania, 1977.

This center has the most up-to-date multimedia matts produced by over 90 publishers in the field of affective education. Filmstrips, films, kits, games, microfiche matts, career briefs, test specimens for the pre-school, K-12, post-secondary, special education and professional areas are included. In-service workshops are conducted, bibliographies are available at all levels, demonstrations of matts and their use are available, plus suggestions for beginning or improving existing programs.

Cost: Information available from PA Guidance Service Center, 5301 Jonestown Road, Harrisburg, Pennsylvania 17112. (717) 652-8200.

Collins High School. Peer Assisted Leadership Services (PALS). Fayette County, West Virginia, 1976.

Project PALS is a program for training students in grades 9, 10 and 11 in self-awareness, career awareness and career exploration. The objective of the program is to train secondary students in discovery of career-relevant characteristics, to work with elementary students through a career education approach, using counseling skills and group guidance processes and to provide in-service training for teachers and principals in career education and self-improvement.

Cost: Information available from publisher.

Evans, Rupert et al. Career Education in the Middle/Junior High School. Salt Lake City, Utah: Olympus Publishing Co., 1973. (ED 102 393)

This book is designed to help teachers, counselors and administrators at the junior high school level to become more effective in the aspects of human development tasks, the development of values and the discovery of talents related to achievement and service. It is comprehensive enough to serve as a standard

reference source for career education as it applies to early secondary grades.

Cost: \$7.95

Guidance Associates. *Career Values: What Really Matters to You?* Pleasantville, New York: Guidance Associates, 1977.

This five-part series of sound filmstrips introduces the concept that personal values are a key ingredient in job satisfaction. Included are group-tested questions for discussions, printed scripts and presentation instructions. The series, for use at the high school level, explains what career-related values are, helps students identify and rank their own career values and priorities, and helps them relate their career values to decisions they will make.

Cost: 5 filmstrips and 5, 12" LPs, \$97.50

Holland, John L. *The Self-Directed Search: A Guide to Educational and Vocational Planning* (SDS). Palo Alto, California: Consulting Psychologists Press, Inc., 1973.

The SDS centers on Holland's career development theory concerning six occupational orientations: realistic, investigative, artistic, social, enterprising, and conventional (RIASEC). The SDS is designed for students in grades 9-12. The test is self-administered, self-scored, and profiles are also done by students. There is no time limit on the test. Students compare their own test scores and ratings with the test scores and ratings of individuals currently employed in various occupations outlined in the material. The result is that students have a better self-understanding in relation to different occupations.

Cost: Specimen Set--\$2.00. Package of 100 sets (set of Assessment Booklets and Occupational Finders), \$65.00

J. C. Penney Company, Inc. *Career Development Education for Living*. New York: Educational Relations, J. C. Penney Co., Inc., 1974.

This kit consists of a filmstrip and cassette plus a copy of the script, discussion suggestions, transparencies, cards and a

teacher's guide. The purpose of the kit is to help students probe and discuss attitudes and beliefs about work and leisure and development of work values. It combines self-awareness and career awareness through experiences in the home, classroom and community. It can be used from the primary grades through adult education. Emphasis is placed on values clarification, work values and personal values.

Cost: \$13.75

Miller, Sherod; Nunnally, Elam W. and Wackman, Danile B. *Alive and Aware: Improving Communication in Relationships*. Minneapolis: Interpersonal Communication Programs, Inc., 1976.

This 287-page book is designed to help the reader increase awareness of how to communicate and relate to other significant people. It teaches specific skills for helping students more effectively and flexibly express an on-going awareness. It is also designed to increase choices-ways of improving and enriching relationships. The book progresses through four sections: emphasizing self-awareness; awareness of others; developmental issues in relationships; styles of communications; patterns of relating; and building self and other esteem. The book has a developmental rather than problem orientation. It translates modern communication, gestalt and systems theory into everyday application for the average person. A secondary school student workbook and a classroom instructor manual is also available.

Cost: \$6.95.

Richmond Virginia Public Schools. "Guidelines for Pupil Personnel Services Teams." Richmond, Virginia: Richmond Public Schools, 1974.

This seven-page document outlines linking high school students and primary students in the team approach to P.P.S., instituted by the Richmond schools. Secondary students experience career development growth as they assist primary students in their activities. It includes the team concept philosophy, a description of the teams, a delineation of the coordinator's role and duties. And it includes an explanation of the team's operation

which divides the functions into those considered primary and those considered secondary. It includes team record forms and several form samples.

Cost: Information available from publisher

Simon, Sidney B. *Meeting Yourself Halfway: 31 Value Clarifications for Daily Living*. Niles, Illinois: Argus Communications, 1974.

This book, an approach to personal growth, seeks the reader's response through strategies developed and refined over years of research with thousands of people. The author has arranged exercises in self-discovery which reveal the simple, vital, dramatic truth: What we do is what we are. How we act tells us what we really value. The book was designed to give a convenient format that will bring the reader into a vital process. The book is designed for the secondary school-adult reader.

Cost: \$4.95

A List of Additional Practices

Alleghany County Schools. *Student Workbook on Career Awareness and Exploration*. Belmont, New York: Alleghany County Schools, 1975.

Allen, R., and Lahart, D. "Eco-Act: A Role-Playing Game to Clarify Environmental Values, High School Level." *National Association for the Advancement of Humane Education Journal*, 3, 2, p. 23-28, 1976.

Argus Communications. *Friendly and Hostile*. Niles, Illinois: Argus Communications, 1977. Cost: \$20.00.

_____. *Lifeline: Values Education Curriculum*. Niles, Illinois: Argus Communications, 1977. Cost: \$49.50.

_____. *Making Sense of Our Lives*. Niles, Illinois: Argus Communications, 1977.

_____. *Truth and Consequences*. Niles, Illinois: Argus Communications, 1977. Cost: \$20.00.

- _____. *You Have to Want Something*. Niles, Illinois: Argus Communications, 1977. Cost: \$20.00.
- Bell, J. *Assertiveness: Innovations, Applications*. San Luis Obispo, California: Impact Publishers, 1977.
- _____. *Leadership is Everybody's Business*. San Luis Obispo, California: Impact Publishers, 1976. Cost: \$4.95.
- _____. *Your Perfect Right*. San Luis Obispo, California: Impact Publishers, 1974.
- Bobbs-Merrill Company. *Generation Gap*. Indianapolis, Indiana: Bobbs-Merrill Company, 1974.
- Campbell, D. *If You Don't Know Where You're Going, You'll Probably End Up Somewhere Else*. Niles, Illinois: Argus Communications, 1974. Cost: \$6.50 total set; \$1.95 paperback; \$5.00 set of 10 spirit masters.
- Career Growth Associates. *Finding a Job You Feel Good About*. Niles, Illinois: Argus Communications, 1977.
- Center for Vocational Education. *Self Appraisal for Decision Making and Career Planning*. Columbus, Ohio: Center for Vocational Education, 1974.
- Doubleday Multimedia. *Find Yourself, Then Your Job*. Santa Anna, California: Doubleday Multimedia, 1973.
- Gelatt, H.; Varenhorst, B.; and Miller, G. *Decisions and Outcomes*. Princeton, New Jersey: College Entrance Examination Board, 1973.
- Guidance Associates. *The Adolescent Experience Series*. New York: Guidance Associates, 1976.
- _____. *The Changing Work Ethic*. New York: Guidance Associates, 1976.
- _____. *Making the Most of Your Talents*. New York: Guidance Associates, 1976.

- Harmin, M.; Havens, R.; and Sorenson, D. *Value Clarification in Counseling*. Madison, Wisconsin: Educational Media Corporation, 1974. Cost: \$345.00 plus postage; 3-day rental, \$25.00 plus postage.
- Hooker, D. and Fleming, A. *Me and Jobs*. New York: Educational Design, Inc., 1974.
- Kennedy, Eugene. *If You Really Knew Me, Would You Still Like Me?* Niles, Illinois: Argus Communications, 1975.
- Lembo, John. *Help Yourself*. Niles, Illinois: Argus Communications, 1977.
- McGravie, A. *It's Easy to be Liked*. Minneapolis, Minnesota: Finney Company, 1974.
- Miller, S.; Nunally, E.; and Wackman, D. *Alive and Aware*. Minneapolis, Minnesota: Interpersonal Communications Programs, Inc., 1974.
- Phillips, P., and Cordell, F. *Am I OK?* Niles, Illinois: Argus Communications, 1975. Cost: \$34.00 total kit; \$4.95 paperback; \$15.00 set of 30 spirit masters; \$17.50 set of 26 TA posters.
- Powell, John. *Better Personal Relationships through Honest Communication*. Niles, Illinois: Argus Communications, 1974.
- Rampel, M., and Bineham, W. *Building Self-Esteem*. Trenton, New Jersey: New Jersey State Department of Education, 1975.
- Rettig, J. *Careers: Exploration and Decision*. Englewood Cliffs, New Jersey: Prentice-Hall, 1974.
- Scholastic Book Services. *Family Living*. Englewood Cliffs: New Jersey: Scholastic Book Services, 1975.
- Schrank, Jeffery. *Effective Communication*. Niles, Illinois: Argus Communications, 1977.
- Science Research Associates. *Junior Guidance Series*. Chicago, Illinois: Science Research Associates, 1975. Cost: complete set of 15 booklets: school price, \$15.05.

Valett, Robert. *Self-Actualization*. Niles, Illinois: Argus Communications, 1974.

References

Bailey, L. J., and Stadt, R. *Career Education: New Approaches to Human Development*. Bloomington, Illinois: McKnight Publishing Co., 1973.

Briggs, Dorothy Corkille. *Your Child's Self-Esteem*. Garden City, New York: Doubleday-Dolphin Books, Inc., 1975.

Crites, John O. *Vocational Psychology*. New York: McGraw-Hill, 1969.

Erickson, E. *Identity and the Life Cycle*. New York: International University Press, 1976.

Katz, Martin. *Decisions and Values: A Rationale for Secondary School Guidance*. New York: College Entrance Examination Board, 1963.

Krumboltz, John D. et al. "A Social Learning Theory of Career Selection." *Counseling Psychologist*, 6; 1, p. 71-80. 1976.

Osipow, S. H. *Theories of Career Development*. New York: Appleton-Century-Crofts, 1973.

Pietrofesa, John J. and Splete, Howard. *Career Development: Theory and Research*. New York: Grune & Stratton, 1973.

Rosenberg, Morris. *Society and the Adolescent Self-Image*. Princeton, New Jersey: Princeton University Press, 1965.

Super, D. E. "A Theory of Vocational Development." *American Psychologist*, 8; p. 185-190, 1953.

Super, D. E.; Starishevsky, R.; Matlin, N.; Jordan, J. P. *Career Development: Self-Concept Theory*. New York: Teachers College, Columbia University, 1963.

Part B

Occupational Knowledge Practices

What Are Occupational Knowledge Practices?

Typically, the entire realm of occupational information is thought of as reflecting activities that produce goods and services in our economy. Nationally, occupational information is organized and described by various government sources such as the *Dictionary of Occupational Titles* (DOT), the 15 career clusters suggested by USOE, the computerized National Occupational Information System (NOIS), and by commercial materials such as the *Career Information Kit* by Science Research Associates or the Appalachia Educational Laboratory's *Career Information System* (see Hoppock 1976).

Using dictionary definitions, occupational knowledge means an acquaintance with, or awareness about the way people support their lives. This includes all forms of paid and unpaid employment. Sometimes occupational knowledge is referred to as career awareness, career information, career orientation, occupational awareness, occupational information or vocational information. While these terms imply the same meaning, it should be noted that "career" connotes more than the principal means of livelihood. Here, occupational knowledge is generally used to represent a sufficient state of occupational understanding by students so they can meaningfully plan careers.

Why Have Occupational Knowledge Practices in the School?

Personal occupational knowledge grows as the individual grows. In the early years one is aware of the work parents and relatives do. One observes work done in the community. Television and other media add another dimension to one's knowledge of work. The current popularity of career education has increased the amount of

planned instruction about occupations one receives in school. Once a person enters the world of work, more occupational knowledge is gained through experience and accumulation of information.

For high school students, particularly younger ones or those who have not developed sufficient career maturity, occupational information is a critical ingredient in helping a student establish an occupational identity (Havighurst 1964). Occupational information provides a basis for further exploration of jobs and grist for the decision-making process which should lead to meaningful career planning (see Chapter 4). Research has shown, as Borow (1973) noted that students moving through middle childhood and early adolescence tend to prematurely and unconsciously reject whole categories of work. This, of course, biases the student's exploration of work and unnecessarily limits the degree of potential occupational choice.

The underlying assumption of instilling occupational knowledge in students is that the more information they have, the greater the probability is they will enter work that will be congruent with their self-concept and thus be more satisfied. This is not only important for first career choices, but has implications for future success in the face of greater and greater occupational mobility among people (Calhoun and Finch 1976; Hoyt 1975). The goal for choosing and implementing occupational knowledge practices as part of a comprehensive career guidance program is to give students a broad range of information with which they can make personal career decisions.

An Overview of Current Practices

Occupational information practices are bountiful. Most are aimed at late elementary and middle school students. Of the latter, most are appropriate for 9th and 10th graders or older students who have not gained sufficient career maturity. Types of materials vary. They come in all forms ranging from a single brochure about a given occupation, through comic book tours of an occupational cluster, to sophisticated, individualized computer-assisted instruction covering all occupations. Most practices can stand alone, while others require gathering supplemental materials. Two defects noted in just a few of the practices reviewed were out-of-date information and sex-role stereotyping.

On the whole, occupational knowledge practices have no limits as far as implementation is concerned. These practices can be taught through courses in the regular curriculum, special courses (see Chapter 2), career resource centers, counselor's or librarian's files, or through a computer (see Chapter 8). Open access practices allow students to use them at any time. Some practices are counselor-client oriented in a one-to-one situation, while others are for large or small groups.

What to Consider When Installing Occupational Knowledge Practices

When selecting a practice or practices to use, keep in mind this key question: Which students are getting what information when? Of course, a student's prior experience with, and knowledge of, occupational information will (or should) determine the starting point, scope, and depth of the program. The occupational information practices should fit reciprocally with the other elements of a comprehensive career guidance program. The intent of the occupational knowledge practices should always be to provide as much occupational information as needed by students. When resources (people, time, space, equipment, and money) are limited, efficiency and effectiveness of the chosen practice(s) become even more critical.

Some pitfalls to avoid when implementing occupational knowledge practices include:

1. Confusing and frustrating students with too much information at one time
2. Ignoring individual needs
3. Failure to relate students self-concept
4. Failure to realize some materials may contain mostly propaganda in favor of a particular occupation
5. Not checking for racial and sexual stereotyping
6. Using outdated or inaccurate information

7. Not following-up or evaluating information received by students
8. Not timing the delivery of information for maximum benefit of the students
9. Not taking into account local employment patterns and economic conditions
10. Not realizing the dynamic changes of the labor market

Also, it must be remembered that practices should be structured so students may re-enter for new or updated knowledge of interest to them. Part of the delivery of practices should be devoted to giving students the skills for getting information they need once they have left the school.

An Illustration of an Occupational Knowledge Practice

The Indianapolis Public Schools reported the availability, at no cost, of a practice called *Orientation*. *Orientation* is a 24 page document that outlines a counselor-led, one-half credit, one semester, required course for all 9th grade students (*Orientation* 1975, p. 1).

Its main goals are to familiarize students with the school organization and to assist every student in learning about the adult world of work. Students will look at themselves in relation to careers and the world of work; they will be exposed to a wide range of careers covering the fifteen occupational clusters outlined by the U.S. Office of Education; and they will begin to form a career plan of their own.

The general objectives from *Orientation* (1975, p. 2) are stated as:

- A-1. Introduce students to their "career selves."
- A-2. Expose students to the occupational cluster concept and to a wide range of occupations within each cluster.

A-3. Help students translate self and occupational information into a career plan.

Orientation delineates a general plan of instruction for accomplishing three general objectives which are broken down into 17 tasks. Additionally, 12 local option curriculum items are suggested. Time-lines are offered for each task based on 9, 10, 11, 12, and 13 weeks per semester. Materials, methods, and some test devices are described for each task activity. Five printed items require duplication by the user. Supplemental materials such as the *Dictionary of Occupational Titles* and *Chronicle Guidance View Deck* are required to accomplish the tasks and must be acquired separately, if not already available to the school. There are 14 items in all, most of which are commercially prepared.

Orientation was developed in 1975 as a guidance practice that would facilitate a comprehensive career guidance program to students. It orchestrates individual practices into a manageable component of the schools program. *Orientation* is available by contacting: Dr. Wally Hoffman, Indianapolis Public Schools, Room 501 F, 120 East Walnut Street, Indianapolis, Indiana 46204, (317) 266-4477.

Abstracts of Selected Practices

Anderson, Judith et al. *Exploring Career Interests*. Chicago: Science Research Associates, 1975.

This program for early secondary grades through adult consists of 58 games and a teacher's guide, and deals with career development and exploration in an entertaining and highly motivating manner. Basic occupational information like description of duties, education and training, special talents or abilities and places of employment are explored in 10 interest areas. Multimedia games incorporating a cassette tape, colorful playing boards and various manipulatives provide a change to printed materials. All games are field-tested with a full range of students in a variety of school settings.

Cost: \$289.00 complete kit

Campbell, Hartley and King, Catherine. *Developing Local Career Information Systems for Middle and Secondary Schools*. Columbus, Ohio: The Ohio State University, Center for Vocational Education, 1975.

This is a handbook to assist local, regional or state guidance personnel in developing locally relevant career information materials. The conceptual framework is supplemental with implementation strategy and guidelines for local use in developing their own career information system. The system makes use of the *Dictionary of Occupational Titles* as the information base.

Cost: \$3.25

Doubleday Multimedia. "Careers: Opportunities for Training." Santa Anna, California: Doubleday Multimedia, 1973.

This 15-minute, color film points out that our society has equated success with graduation from a four-year college or university. The film shows four different types of training opportunities: regional, occupational centers; trade colleges; armed forces training schools; and factory trade schools. A teacher's guide is included.

Cost: \$210.50 or \$21.00 to rent

Edgerton, A. H. *Career Information Kit*. Chicago: Science Research Associates, Inc., 1977.

This library of available occupational materials furnishes comprehensive information on jobs employing over 90 percent of the labor force today. About 500 pages of current literature meeting National Vocational Guidance Association guidelines are alphabetically filed by job families to help students in grades 9-14 explore many job opportunities. The index is cross-referenced to the Dewey Decimal System, directing students to further reading. It is for group and individual career counseling.

Cost: \$362.00 for complete in corrugated case (higher in metal file)

Fadale, LaVerna M. *Career Awareness Inventory*. Bensenville, Illinois: Scholastic Testing Service, 1974.

This test for students in grades 4-9 is designed to identify the occupational awareness level of students. Its seven subtests are concerned with student identification of occupations, occupations requiring college, personal knowledge of workers, connection between occupations and specific products, occupational status, occupational clusters and work attitudes.

Cost: \$12.00 for 20 reusable booklets; \$8.50 for 50 answer sheets and \$6.60 for administrator's manual

Finney Company. *Occupational Guidance*. Minneapolis: Finney Company, 1976.

This 40-volume, five-unit series contains 800 originally researched four-page job monographs. The series includes career information for those who plan to enter the work force after high school graduation, for those who plan to attend vocational/technical schools, business schools, colleges and universities and for individuals reentering the work force. One complete unit of this up-to-date material is revised annually. Each monograph gives information on how to prepare for the job: what to expect in the way of duties, wages and working conditions, how to prepare in secondary and post-secondary schools and what skills and attributes are needed to be successful. The 800 job descriptions are packaged in five units. Each unit consists of eight bound volumes with 20 monographs per volume, for a total of 160 monographs per unit.

Cost: \$48.00 per unit or \$240.00 for the complete set of five units

Holloway, A. Joanne, and Naper, Joan T. *Introducing Career Concepts, Series 1 & 2*. Chicago: Science Research Associates, 1975.

This is a structured lesson-activity program that focuses on students' developing self-awareness and organizes their experiences for future decision-making. Throughout the program, students learn to evaluate tentative career choices by asking themselves such questions as "What do I enjoy?" and "What can I do?"

They apply career concepts they learn to answer these questions. Optional student inventory summarizes each of the lessons. Series 1, for grades 5-7, examines interests, focus, abilities, school subjects, work features and work settings. Series 2, for grades 7-9, presents concepts of work styles, work roles, skill development, training needs, income patterns and employment opportunities.

Cost: Series 1 and 2, package of 25 booklets each—\$12.25

Pathscope Educational Media, Inc. *Careers*. New Rochelle, New York: Pathscope Educational Media, 1977.

This series on various careers, consisting of two color filmstrips, two cassettes and a comprehensive teacher's manual for each program, takes a "why you might be attracted to this career" approach in a two-part format. The first part covers a broad spectrum of aspects of a career, using many on-the-job interviews with people. The interviewees tell the kind of people they work with, personal satisfactions and disadvantages of the job. The second part focuses on the details of the career, attitudes and aptitudes needed and training required. *Careers* was created in cooperation with The Associated Press.

Cost: \$46.00 for each film. Catalog available from publisher on various occupations

Real World Newspaper. New York: King Features Education Division, 1977.

This student tabloid is designed to raise and answer career needs of students in grades 9-12. To date, the newspaper has been responding to needs as varied as careers for women, minorities, and the gifted. It answers questions of students and takes suggestions for articles from subscribers.

Cost: \$135.00 plus postage for a school year's subscription which includes 30 copies of nine editions and a different teacher's guide for each month

U.S. Government Printing Office. *Occupational Outlook Handbook, 1976-1977 Edition*.

This book presents occupational information on over 800 occupations in 30 major industries in the United States. It is suitable for independent use by students in grades 7-12, and detailed enough for use as a professional counselor's reference tool. Its purpose is to provide information on career alternatives available to young people, and to help them make intelligent career plans. This edition uses a new career clustering system designed to organize occupations by related activities. Topics include typical job duties, aptitudes, interests, required training, and education, usual working conditions, and future job opportunities.

Cost: \$7.00 (payable to Superintendent of Documents)

A List of Additional Practices

- American Personnel and Guidance Association. *Career Wheels*. Washington, D.C.: American Personnel and Guidance Association, 1977.
- Argus Communication. *Consumerland: How High the Mountain?* Niles, Illinois: Argus Communications, 1974.
- Blau, Melinda E. *Teacher's Guide, Adventures in the World of Work*. New York: Random House, 1976.
- Boocock, S. *Life Career Game*. Indianapolis, Indiana: The Bobbs-Merrill Company, 1973.
- California State Department of Education. *Orientation to Public Service Occupations. Curriculum Guide*. Sacramento, California: California State Department of Education, Division of Vocational Education, 1975.
- Careers, Inc. *Career Guidance Index*. Largo, Florida: Careers Inc., 1977.
- Career Guidance Media. *Career Education Bulletin Board Displays*. Alexandria, Virginia: Career Guidance Media, 1975.
- Carter, R. et al. *This I Can Be*. Weschester, Illinois: Benefic Press, 1975.

Chronicle Guidance Publications, Inc. *Career Index*. Moravia, New York: Chronicle Guidance Publications, Inc., 1977.

File of Facts. Moravia, New York: Chronicle Guidance Publications, Inc., 1976.

LOOK. Learning Occupational Objectives Kit. Moravia, New York: Chronicle Guidance Publications, Inc., 1976.

Occupational View-Deck. Moravia, New York: Chronicle Guidance Publications, Inc., 1977.

Curriculum Innovations, Inc. *Career World: The Continuing Guide to Careers*. Highwood, Illinois: Curriculum Innovations, Inc., 1977.

Encyclopedia Britannica Educational Corporation. *Watcha Gonna Do?* (Films and teacher/student materials.) Chicago: Encyclopedia Britannica Educational Corporation, 1976.

Ericksen, Erik et al. *Career Information Systems of Iowa: Activity Report for FY 1975*. Des Moines, Iowa: Iowa State Department of Public Instruction, Guidance Services Section, 1975.

Eugene Public Schools. *Cal Young Integration of Career Education into 9th Grade Classes: Suggestions for the Subject Areas*. Eugene, Oregon: Eugene Public Schools, 1974.

Finn, P. *Career Education Activities for Subject Area Teachers*, Vol. III, Grades 9-12. Cambridge, Massachusetts: Abt Publications, 1975.

Fries, A. C., and Clayton, D. *Timed Writings About Careers*. 2nd edition. Cincinnati, Ohio: South-Western, 1975.

Household Finance Corporation. *Your Guide for Teaching Money Management*. Chicago, Illinois: Household Finance Corporation, 1977.

King Features Education Division. *Comics Career Awareness Program*. New York: King Features Education Division, 1973.

People at Work Library. New York: King
Features Education Division, 1975.

Lee, Jasper S. *Exploring Agricultural Careers: The Present World of Work.* Blacksburg, Virginia: Virginia Polytechnic Institute and State University, 1975.

Exploring Agricultural Careers: The Importance of Work. Blacksburg, Virginia: Virginia Polytechnic Institute and State University, 1975.

Little Kenny Publications. *Career Dials.* Chicago, Illinois: Little Kenny Publications, 1976.

Nicolet High School. *Occupational Information.* Glendale, Wisconsin: Nicolet High School, 1976.

Oregon State Department of Education. *Careers in Communications Media. Instructor Guideline.* Salem, Ore.: Oregon State Department of Education, Career and Vocational Education Section, 1975.

Prudential Insurance Company of America. *Facing Facts About Vocational Education for Your Career: A Guide for High School Students. Their Counselors and Parents.* Newark, New Jersey: Prudential Insurance Company of America, 1975.

Ritvo, Phyllis, and Hanse, Mary Lewis. *Career Guidance in the Arts and Humanities: Activities, Information and Resources for Grades 7-12. Dance, Music, Theater, and Media.* 1976. Eric Microfiche. ED 138 029.

Science Research Associates. *Handbook of Job Facts.* Chicago, Illinois: Science Research Associates, 1976.

Teal, Everett, A. *The Occupational Thesaurus: Volume 1 and Volume 2.* Bethlehem, Pennsylvania: Lehigh University, 1973.

Tuchscherer, J. *Career Awareness Program.* Dickenson, North Dakota: Dickenson Area Vocational High School, 1974.

United States Department of Labor, Department of Labor Statistics, "Toward Matching Personal and Job Characteristics." *Occupational Outlook Quarterly*, 19; 1, p. 2-18, 1975.

References

- Avent, Catherine. *Practical Approaches to Career Education*. 1974. ERIC Microfiche. ED 109 479.
- Bailey, L., and Stadt, R. *Career Education: New Approaches to Human Development*. Bloomington, Illinois: McKnight Publishing Company, 1973.
- Borow, H. "Alienation of Youth from Work." In *Understanding Adolescence*. Edited by J. Adams. Boston, Massachusetts: Allyn & Bacon, 1973.
- Calhoun, C., and Finch, A. *Vocational and Career Education: Concepts and Operations*. Belmont, California: Wadsworth Publishing Company, Inc., 1976.
- Corcoran, Ellen. "Helping Secondary Students Connect with School: A New Design." *Clearinghouse*, 49, 9, p. 391-393, 1976.
- Flanagan, John C. "Planning Career Goals Based on Data from Project Talent." *Vocational Guidance Quarterly*, 25, 2, 270-273, 1977.
- Havighurst, R. "Youth in Exploration and Man Emergent." In *Man in a World of Work*. Edited by H. Borow. Boston, Massachusetts: Houghton-Mifflin Company, 1964.
- Hoppock, R. *Occupational Information*. New York: McGraw-Hill, Inc., 1976.
- Hoyt, K. *An Introduction to Career Education*. Washington, D.C.: U.S. Government Printing Office, 1975.
- Hoyt, K.; Evans, R.; Mackin, E.; and Magnum, G. *Career Education: What It Is and How to Do It*. 2nd edition. Salt Lake City, Utah: Olympus Publishing Company, 1977.
- Hoyt, K.; Evans, R.; Magnum, G.; Bowen, E.; and Gale, D. *Career Education in the High School*. Salt Lake City, Utah: Olympus Publishing Company, 1977.

Huffman, Jim. "Establishment of a Career Information Center." *School Guidance Worker*, 30, 2, 9-13, 1974.

Kanzaki, George A. "Fifty Years (1925-1974) of Stability in the Social Status of Occupations." *Vocational Guidance Quarterly*, 25, 2, 101-104, 1976.

Lackey, L. *A Program for Improving the Interpersonal Competence of High School Students*. Alexandria, Virginia: Human Resources Research Organization, 1974.

Patterson, Lewis E. "Career Information: Experience is the Best Teacher." *Vocational Guidance Quarterly*, 25, 2, 112-118, 1976.

Paul, K., and Braden, P. *Occupational Analysis for Educational Planning*. Columbus, Ohio: Merrill Publishing Company, 1974.

Reardon, Robert C., and Domkowski, Dorothy. "Building Instruction into a Career Information Center." *Vocational Guidance Quarterly*, 25, 3, 274-278, 1977.

Remenyi, Andrew G., and Fraser, Barry J. "Effects of Occupational Information on Occupational Perceptions." *Journal of Vocational Behavior*, 10, 1, 53-67, 1977.

Stevens, David W., ed. *Occupational Employment Projections for Program Planning Purposes: Issues and Examples. Proceedings of a National Workshop-Conference*. 1976. ERIC Microfiche. ED 134 841.

Syracuse City School District. *Guided Occupational Orientation Program. Secondary Program. Final Report. Volume IV*. 1974. ERIC Microfiche. ED 107 872.

Vose, G. *The Self-Directed Career Program as a Tool for Presenting Career Information to Ninth Grade Students*. 1974. ERIC Microfiche. ED 112 105.

Wolfbein, S. *Occupational Information: A Career Guidance View*. Philadelphia, Pennsylvania: Philadelphia Book Company, 1968.

Chapter 4

Career Planning Through Exploration and Decision-Making Practices

Many factors affect a student's career planning or lack of it. The school can control some factors such as what career planning skills a student learns, but it cannot control other factors such as family and mass media. To some degree, all factors influence students in creating their career plans which may or may not be adequate. When career planning is not adequate or mature, it is usually because students lack the information or skills to do personal planning. Basic to meaningful career planning, for anyone, is a modicum of self-understanding and a knowledge of occupations (see Chapter 3).

As students explore career options, information is gathered and a dynamic, interactive, and unique network of decisions is built. During this preparation stage (Super 1957), students make tentative decisions or career plans. While exploration and decision-making are interactive in the daily lives of students, it is easier to understand each process by considering them separately. Part A of this chapter discusses career exploration while Part B addresses career decision-making.

Part A

Career Exploration

What Are Career Exploration Practices?

Career exploration is the process of investigating selected occupations and relating them to one's abilities, interests, and education. The exploration process differs from awareness which is a general, "get acquainted" approach to learning about self in the world of work. During exploration decisions and plans are made for achieving entry into a chosen career.

There is not, however, one standard definition of the career exploration process. Jordaan (1963) defines exploration as mental or physical activity undertaken with the hope of eliciting information about one's self or one's environment from which a solution, conclusion, decision, or hypothesis, can be drawn. Further, Jordaan characterizes the exploration process as the student executing five steps: (1) search, (2) experimentation, (3) investigation, (4) trial, and (5) hypothesis testing. While Jordaan discusses cognitive information, Tuckman (1973) stresses the importance of the affective domain in exploration in calling for: (1) introspection/experiencing, (2) orienting, (3) valuing, and (4) integrating of the student's inner life.

Career development theorists do agree (Herr 1972) that people must be comprehensive in their exploration and deal not only with objective information such as potential earnings, entry requirements, and job forecasts, but also with information about the psychological and other intangible working conditions of a given occupation.

Why Have Exploration Practices in the High School?

Career exploration is a human activity that for many begins in the adolescent period with the search for an occupational self-concept

(Super, 1957), and can continue throughout life as mental, biological, physical, and environmental changes call for a re-definition of one's occupational self-concept. For the purposes of this book, the career exploration process during the age period of 14-18 is the primary concern. Youth must have the opportunity to explore immediate career plans and to develop related skills that will assist them through life.

An Overview of Current Practices

Most of the several hundred career exploration activities for high school students contain the elements of self-understanding, career awareness, and decision-making. Locally developed activities outnumber commercial products. Only very few have reported evaluative data, thus making unqualified recommendations difficult to offer. Activities are available for counselors, teachers, and students working in any combination. From a program standpoint, however, all activities should be coordinated regardless of origination or implementation.

Buckingham (1977) describes several typical exploration activities:

Using the Occupational Outlook Handbook

Relating Teacher Work Experience

Taking Field Trips with Clear Cut Objectives

Assigning Student Skills Via Testing; Determining Student Goals

Orienting Students to the Classifications of Occupations

Linking Community Members to the School

Enriching the Curriculum with a Career Orientation Training on the Job

Encouraging Self-Direction through Guidance and Counseling

The following illustrates a career exploration practice.

What to Consider When Installing Career Exploration Practices

Career exploration activities should have certain qualities (Ristau 1975). Students should learn about their personal strengths, weaknesses, abilities and areas for improvement. They should understand how personal values and characteristics affect career choice and job satisfaction. The elements of decision-making, which are covered later, and how to explore job families should be grasped by the students.

When developing the exploration part of a program, practices should be selected with several things in mind. High school students are moving or have moved from concrete to abstract thinking (Ausubel 1970) but student development varies. Activities should reach all students and should encourage students to look at themselves critically in relation to occupations. Simulated work, as well as on-the-job experience, is desirable. Students need broad-based, in-depth, exploration where decision-making is stimulated. Activities should avoid being doctrinaire or giving students a narrow perspective. As part of a program, career exploration activities should be continuous, developmental and articulated throughout the school and community. They can be formal or informal, structured or unstructured, planned or serendipitous.

An Illustration of a Career Exploration Practice

The Fascinating World of Work Career Awareness Series is an up-to-date practice designed for students in grades 7-12. The kit contains four teacher's guides with scripts, a recap of career points, suggested discussion topics, sample test questions, and suggested classroom and individual activities. For students there is a minimum of paper work. Lifestyle evaluation forms are included for use with each career filmstrip.

Currently, there are 30 sound/filmstrips. The first, "How to Explore the Fascinating World of Work," motivates students to seriously explore careers. Each of the other 29 titles explores a

particular career which is related to the occupational cluster under which it falls. Additional titles will be released by the developer on a regular basis as a way to provide contemporary coverage of careers.

The developers of this practice have included a simple-to-use mathematical equation, called *The Way of Life Formula*, so students can compare what a career has to offer with what they want out of life. The formula is based on nine life values: security, wages, creativity, status, influence, responsibility, home life, variety, and advancement. Each value is rated from zero to 10 by the student. Each filmstrip has rated each life value present by a similar point system called Career Points. By multiplying each personal point by a given career point and then adding subtotals, the student derives a Career Rating Number for a given career.

Students rates each career explored on a life style evaluation form so ratings may be compared on total points or individual life values.

The developers have classified careers under people, data, and things and have related them to occupational clusters. Further, they have related possible advantages and disadvantages for students to discern for themselves. Racially and sexually balanced graphics preclude stereotyping. The language used is student-oriented. The materials can be used in the classroom, in a workshop, or independently.

For further information contact: The Fascinating World of Work Career Awareness Series, 1977, National Career Consultants, Inc., 1300 E. Arapaho Road, Richardson, Texas 75081. Cost: \$735.

Abstracts of Selected Practices

Abt Associates, Inc. *Exploring Careers*. Cambridge, Massachusetts: Abt Associates, Inc., 1973.

This classroom materials package for grades 7-12 is designed to help students gain information and insights necessary to make successful career decisions, by engaging in values-oriented research and analysis activities. For each activity, spirit masters for student instructions and student worksheets are included, as well as detailed directions and concise teaching objectives,

subject area relevance and occupational relevance listings. The 16 activities, each with a strong career education focus, include topics such as "tape swap" where occupational interview recordings are traded; "anything you can do" with a serious look at sex bias in jobs and "costs of living" with a realistic look at independent living.

Cost: \$35.00 plus \$1.50 for shipping

American Institutes for Research. *Planning Career Goals*. Monterey, California: CTB/McGraw-Hill, 1976.

This package is a new battery of tests that will assist guidance and counseling personnel in helping students in grades 8-12 make realistic long-lasting educational and career plans. PCG combines an interest inventory, career information measures, ability measures and a life and career plans survey in a single testing system, and can be used to develop an individual student's profile for use by a counselor with the Career Data Book.

Cost: Information available from publisher.

Axelrod, Valija; Drier, Harry; Kimmel, Karen; Sechler, Judith. *Career Resource Centers*. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1977.

This 197 page handbook is for educational planners in local schools, post-secondary institutions and other community organizations who are interested in expanding their career guidance and education delivery system. The handbook outlines suggested general plans, procedures, staffing patterns, activities and resources. This book offers suggestions for communities with unique needs for alternative planning methods and career center implementation.

Cost: \$6.75

Brostrom, Wayne. *Career Education: Planning, Learning, Understanding, Succeeding*. Minot, North Dakota: Minot Central Campus, 1977.

Career Education is an educational alternative for secondary students. The program allows students to explore occupational

clusters in relation to their goals and course work pursued in school. Incorporated in the program are basic skills, individual counseling sessions, and seminars. Students are allowed to spend half-days either at the learning center or at community sites. They are required to complete journals on their daily activities. Requirements include certain life competencies, explorations, seminars and basic skills projects.

Cost: Free

Chapman, Vicky and Eisenberg, Lisa. *Opportunity*. New York: Scholastic Book Services, 1976.

This kit, which contains eight filmstrips, eight records or cassettes, 30 student logbooks and a teacher's guide with annotated workbook pages and scripts, is designed to provide students in grades 9-12 with actual practice in employment activities and procedures. In the first filmstrip students are asked questions which they might encounter on a job interview. The next five filmstrips provide information on 15 careers. Another filmstrip provides information on problem solving. In the last filmstrip the students are asked questions to determine how much they have learned throughout the unit. The student logbooks are to be used along with the filmstrips.

Cost: \$169.50

Freeman, John and Lidz, Dick. *Discovery*. New York: Scholastic Book Services, 1973.

Discovery is a career exploration practice that introduces students in grades 7-10 to the role of personality and temperament in making career decisions. Through real interviews on sound filmstrips, students will meet 49 young workers who discuss themselves and their jobs. Students use a logbook supplied with the kit to evaluate their own values and goals in relation to the workers shown on film. The kit has a teacher's guide, 30 student career logs, eight color sound filmstrips with an option of either cassette tapes or records. The student career log has eight chapters keyed to each filmstrip plus a resource guide to the various career clusters.

Cost. \$169.50

Miller-Tiedeman, Anna. *Individual Career Exploration (ICE) Inventory*. Bensenville, Illinois: Scholastic Testing Service, 1976.

This material is programmed to be used without an instructor, if necessary. It is designed to organize information about the self in regard to interests, experiences, ability (as reflected in grades), skills and motivation level. This self-scored instrument has a record sheet showing first and second highest occupational choices, first and second highest value choices, motivation level, and a line to add ACT interest scores which are compatible with this inventory.

Cost: \$1.00 for student inventory information sheet and class manual.

Nichols, Harold E., and Schill, William John. *Yellow Pages of Careers*. Danville, Illinois: The Interstate Printers and Publishers, Inc., 1977.

This 142 page paperback is designed to help students, counselors and the general public decide on careers and to locate jobs in their community. This book helps individuals identify career interests and then relates those interests to places of employment through use of the yellow pages sections of the local telephone book. Topics covered in the book are: identification of personal career interests, exploration of a variety of career areas, selection of career areas related to personal career interests, identification of specific places of possible employment in the local area, development of a comprehensive personal resume, development of a detailed job search plan and conducting an effective job search. The book has been completely tested and validated with individuals ranging in age from 13-45.

Cost: \$4.95

Savin, George. *Career Exploration: Class*. Highland, Indiana: Highland Town School, 1976.

This practice is designed to provide students with a means for evaluating their interests, abilities, and personality, and to help them research various career areas by providing them with first hand knowledge of potential careers through actual on-the-job

experiences. It is a full credit, one semester course offered to any high school student on an elective basis. The course is divided into three phases. In phase one, a series of aptitude and interest inventories are administered to the students. A computer is then used to correlate test results and print suggested career areas for which a student seems qualified. In phase two, extensive research is done in career areas. Phase three is the on-the-job activity phase where students are placed with cooperating employers one-half day per week for five weeks.

Cost: \$5.00

Singer, N. M., Altschuld, J. W. et al. *Seek Introductory Kit*. Minneapolis, Minnesota: NCS Educational System, 1977.

This package of two 35 mm filmstrips, two reusable activity folders of 25 copies each, one consumable blank cartoon activity sheet/125 sheets, eight cluster flyers and one teacher's guide deals with basic aspects of exploring occupations—a process which can strengthen a student's awareness of both occupational and personal factors. Students are encouraged to examine their likes and dislikes, work skills and are introduced to the concept of grouping occupations, such as health and welfare, and trade and finance. The program does not attempt to narrow students' occupational or personal viewpoints, but to emphasize students' abilities to commit themselves to major occupational decisions at the appropriate time.

Cost: \$95.00 plus postage

A List of Additional Resources

Abt Publications. *Adventure—Lifetime Learning Simulation (Grade 10—College and Adult)*. Cambridge, Massachusetts: Abt Publications, 1976.

_____ *Adventure II—Career Guidance Game (Grades 9-12)*. Cambridge, Massachusetts: Abt Publications, 1976.

_____ *Exploring Careers: Classroom Materials Package (Grades 7-12)*. Cambridge, Massachusetts: Abt Publications, 1976.

Addison-Wesley Publishing Company. *Hello World! A Career Exploration Program*. Irvine, California: Addison-Wesley Publishing Company, 1976.

Ailer, Audrey J. et al. *Career Development Exemplary Project. The First Draft of a Curriculum Guide for Grade Nine*. Washington, D.C.: District of Columbia Public Schools, 1975.

Appalachia Educational Laboratory, Inc. *Exploring Careers through Occupational Situations*. Charleston, West Virginia: Appalachia Educational Laboratory, Inc., 1976.

Bayless et al., eds. *Community Service and Related Specialists*. Chicago, Illinois: J. G. Ferguson Publishing Company, 1974.

Bowlsbey, J. *DISCOVER*. Westminster, Maryland: The Discover Foundation, 1977.

Conley, J., and Wernick, W. *Interview Strategies for Career Development*. Niles, Illinois: Argus Communications, 1976.

Cutler, A.; Ferry, F.; Kauk, R.; and Robinett, R. *Job-O Dictionary*. Belmont, California: Career Materials, 1976.

Educational Progress. *The Career Game*. Tulsa, Oklahoma: Educational Progress, 1974.

Ferguson, J. G., Publishing Company. *Encyclopedia of Careers and Vocational Guidance*. Chicago, Illinois: J. G. Ferguson Publishing Company, 1975.

Finney Company. *Occupational Guidance*. Minneapolis, Minnesota: Finney Company, 1975. (VIII, Unit 2, Revision C)

Graven, L., and Muraski, J., eds. *Career Self Analysis*. Huntington, West Virginia: D & E Publishing Company, 1974.

Guidance Associates. *Career Choice: A Lifelong Process*. New York: Guidance Associates, 1976.

Career Direction: High School as Tryout. New York: Guidance Associates, 1975.

Careers and Lifestyles. New York: Guidance Associates, 1974.

Hershbach, Dennis R. et al. *Cooperative Work Experience: An Annotated Resource Guide*, 1975. ERIC Microfiche.

Hirsh, Sharlene P. et al. *Executive High School Internships of America*. New York: Executive High School Internships of America, 1976.

Hooker, D., and Fleming, A. *Me and Jobs*. New York: Educational Design, Inc., 1974.

Huff, Elmer E. *The Career Information Centre: A Demonstration Guidance Project*. Willowdale, Ontario: North York Board of Education, 1974.

Humburg, R.; McGregor, S.; and Kosier, M. *Explore*. Topeka: Kansas: Kansas State Department of Education, 1976.

Kinsinger, R. ed. *Career Opportunities: Health Technicians*. Chicago, Illinois: J. G. Ferguson Publishing Company, 1974.

Lothrop, Lee, and Shepard Company. *Exploring Careers Series and Vocations in Trades Series*. New York: Lothrop, Lee, and Shepard Company, 1977.

Nicolet High School. *Goal Selection and Planning*. Glendale, Wisconsin: Nicolet High School, 1975.

Oegema, David N. *The Career Center—One Tool for Implementing Career Education*. Detroit, Michigan: Michigan Personnel and Guidance Association, 1975.

Science Research Associates. *Career Development Program*. Chicago, Illinois: Science Research Associates, 1976.

 The National Guidance Handbook: A Guide to Vocational Education Programs. Chicago, Illinois: Science Research Associates, 1975.

Sidney, H. ed. *Agricultural, Forestry, and Oceanographic Techniques*. Chicago, Illinois: J. G. Ferguson Publishing Company, 1974.

- Steiger, JoAnn M., and Fink, Arlene. *Expanding Career Horizons*. Springfield, Illinois: State Board of Education, Illinois Office of Education, 1977. (Available from Western Illinois University, 75 Horrallin Hall, Lacombe, Illinois 61455, \$30.00)
- Vocational Biographies, Inc. *Vocational Biographies*. Sauk Centre, Minnesota: Vocational Biographies, Inc., 1977. (update service)
- Vocational Guidance Manuals. *Opportunities In . . . Series*. Louisville, Kentucky: Vocational Guidance Manuals, 1977.
- Wiggs, G. ed. *Career Opportunities: Marketing, Business, and Office Specialist*. Chicago, Illinois: J. G. Ferguson Publishing Company, 1975.

References

- Ausubel, D. "Implications of Preadolescent and Early Adolescent Cognitive Development for Secondary School Teaching." In *Adolescent Behavior in Schools*, S. Frey ed. Chicago, Illinois: Rand McNally, 1970.
- Blimline, Carol A. "The Effect of a Vocational Unit on the Exploration of Nontraditional Career Options." *Journal of Vocational Behavior*, 9, 2, 209-216, 1976.
- Bogie, Donald W., and Bogie, Cheryl E. "The Counselor-Client Contact Variable and Occupational Aspiration-Expectation Discrepancies." *Vocational Guidance Quarterly*, 25, 1, 50-57, 1976.
- Buckingham, L. "Exploration—In the Vanguard of Placement." In *Placement and Follow-up*, Shippen, S., and Wasil, R. eds. Lexington, Massachusetts: Xerox Individualized Publishing, 1977.
- Chapman, Edward N. "Career Search: A Personal Pursuit." Chicago, Illinois: Science Research Associates, 1976.
- Church, O. "Career Exploration by Occupational Modules." *Business Education Forum*, 29, 2, 12-13, 1975.

Ellis, Stephen H. et al. *A Study of Career Centers in the State of California: Final Report*. California: Grossmont Union High School District, 1975.

Fletcher, A. *Make Your Choice: A Careers Simulation*. 1974. ERIC Microfiche. ED 102 482.

Gaspar, Theodore, H. Jr., and Ornvig, Clayton P. "The Relationship Between Career Maturity and Occupational Plans of High School Juniors." *Journal of Vocational Behavior*, 9, 3, 367-374, 1976.

Guidance Associates. *Better Choice, Better Change: Selecting a High School Program*. New York: Guidance Associates, 1975.

Herr, E. *Review and Synthesis of Foundations for Career Education*. Columbus, Ohio: The Center for Vocational and Technical Education, 1972.

Hunter, Susanne M. *Evaluation of a Demonstration Career Information Centre*. Phase 3. Willowdale, Ontario: North York Board of Education, 1976.

Jordaan, J. "Exploratory Behavior: The Formation of Self and Occupational Concepts." *Career Development, Self-Concept Theory*. New York: College Entrance Examination Board, 1963.

Kamp, B. Dan. "Career Training and Counseling with Simulation Gaming." *Journal of Counseling Services*, 1, 2, 7-12, 1976.

Kennedy, E. *Career Exploration: Suggestions for Teachers*. 1974. ERIC Microfiche. ED 098 411.

Lambert, Roger H. et al. *1975 Wisconsin Senior Survey*. Madison, Wisconsin: Wisconsin University, Center for Studies in Vocational and Technical Education, 1977.

Larson, C. G. et al. *General and Vocational Work Experience Education Programs Management System. Career Development Programs. Revised Edition*. California: San Mateo Union High School District, 1975.

Portland Public Schools. *Rivergate Career Education Project: Career Exploration Operations Manual*. Arlington, Virginia: Document Reproduction Service, 1974.

Ristau, R. "Issues and Principles in Career Education." *Balance Sheet*, 57, 4, 162-164, 1976.

Southern Illinois University. *The Career Plan Process. A Curriculum Model for Orientation to the Industrial Related Occupations for Grades Nine and Ten*. Carbondale, Illinois: Southern Illinois University, Department of Occupational Education, 1973.

Super, D. *The Psychology of Careers*. New York: Harper and Row, 1957.

Tuckman, B. "Getting at the Attitudes Problem: Career Development and the Affective Domain." *American Vocational Journal*, 48, 1, 47-48, 1973.

Part B
Career Decision Making Practices

What Are Career Decision-Making Practices

Decision-making is a complex process by which alternatives are evaluated, selected and committed to action by an individual (Barstch, Yost, and Girrell 1976). Perhaps the most important and difficult decision a student makes is choosing what career to pursue. Much has been written about personal decision-making. Researchers of the vocational decision-making process, Gelatt (1962), Hilton (1962), Katz (1963), Tiedeman and O'Hara (1963), Vroom (1964), Fletcher (1966), Kaldor and Zytowski (1969), Hsu (1970) and Dudley and Tiedeman (1977), have developed models in attempts to describe the process and arrive at a theory for prediction. That is, what decisions under what circumstance will yield career success or satisfaction?

The roots of vocational decision making are found in psychology which provides a framework for decision-making. This framework assumes the presence of a decision-maker, a decision situation, information, alternative choices, outcome(s) for each choice, probability of outcomes happening, relative values of outcomes, and commitment to a choice (Jepsen and Dilley 1974).

A common theme of career development theory in general and career decision-making models in particular is the interdependence between personality variables, choice dimensions, and the environment or societal constraints. A person has unique attributes, lives in a defined culture, and operates within certain economic limits. The choices this person makes in a lifetime will build on idiosyncratic series of decisions (Osipow 1973).

Career decision-making models differ in their applicability to practice. Gelatt (1962), Katz (1963), and Kaldor and Zytowski (1969) are advocates of prescriptive models that try to provide rules for people to make better decisions. Others offer a description of

how the process occurs. Some problems of current models include semantic differences, specifying levels of information and lacking compelling evidence of soundness (Jepsen and Dilley 1974).

The literature does offer, however, useful information for helping students make decisions. Gelatt (1962) emphasizes the utility of the decision-making process for students and characterizes it by the following activities: collection of information, assessment of information, prediction of the results of various courses of action, identification of feasible alternatives, evaluation and selection of a course of action, and finally, implementation of the choice.

While this seems slightly mechanistic, it should be noted that people tend to subjectively, rather than objectively, estimate probable outcomes and select outcomes that will be beneficial for themselves. Katz (1963) regards, for guidance practice purposes, values as an entry ground for decision-making and encourages relating them closely to probable outcomes. Bartsch, Yost, and Girrell (1976) further point out the skills most applicable to decision-making including self-understanding of interests, values, abilities, and goals, plus self-management whereby the individual can accurately appraise situations, set meaningful objectives, control fears, and arrange the environment to meet goals. Even though decisions may be made systematically, they can not be guaranteed to work. Rigorous decision-making can only reduce or minimize error (Vroom 1964, and Kaldor-Zytowski 1969). Career decision-making practices encourage students to acquire, develop, and practice decision-making skills.

Why Have Career Decision-Making Practices in the High School?

Decision-making skills are critical to any secondary career guidance program since all student career development activities involve, to some degree, the need to make decisions that lead to goals or other decisions. Through self-awareness, career awareness, and career exploration activities, not to mention maturation and other external factors, information builds in students. They need a way to process it in a way that has personal payoff. Since decision-making is fundamental, the earlier students are trained, the better they should be able to progress with their career development. Additionally, decision-making skills are of life-long benefit and applicable to all areas of human activity.

Emphasizing decision-making skills can be helpful not only to students but to the overall career guidance program of the school. Career decision-making assumes the collection of relevant information and the opportunity for students to interact with teachers, counselors, parents, and significant others. Students who have decision-making skills can better indicate to others what information is needed and, in turn, others can better evaluate how students are moving toward their goals (Gelatt 1962). Also, a decision-making framework can help a career guidance program evaluate the adequacy and accuracy of information it presents to students, all of which adds to students making an informed, considered decision (Gelatt 1962 and Katz 1963).

An Overview of Current Practices

Decision-making practices are available in various forms under many labels. Methods of instruction include self-instruction, small group, large group, and counselor-student techniques, printed, audiovisuals, role play, and computer assisted instruction. There are practices that focus mostly on decision-making while others incorporate decision making as an element combined with, for example, self-understanding and career exploration.

What to Consider When Installing Career Decision-Making Practices

The following are some major considerations in developing decision-making skills through a career guidance program:

1. All students should have the opportunity to learn and practice personal and career decision-making.
2. Different teaching techniques may be required to reach all students.
3. Emphasis on decision-making should be a consistent theme in career guidance activities.
4. Skills can be reinforced through frequent feedback and "refresher" sessions for students.

5. Inservice for teachers and others may be desirable prior to involving students in learning decision-making skills because they may not have them.

An Illustration of a Career Decision-Making Practice

Decisions and Outcomes. This product, intended for senior high school students, college students and other adults, followed *Deciding*, which is geared to students in grades 7-9 and built on its decision-making curriculum. *Decisions and Outcomes* was field-tested by high school students and adults.

Decisions and Outcomes is designed to help learners develop and apply decision-making skills to complex, personal, career, and educational decisions. There are four sections of content:

1. Introduction to decision-making and review of the learner's familiarity with the decision-making process
2. Recognition of one's values and establishing clear objectives from them
3. Gathering and evaluating information, identifying alternatives, understanding risk-taking, and developing decision-making strategies
4. Practice and application of skills and concepts through a variety of exercises

Role-plays and simulations are a significant part of the exercises where students can apply skills in a "safe environment" before tackling their own decisions.

The leader's guide is clearly designed to provide appropriate background information and directions for learning situations. Each section is coordinated with the student booklet. Student objectives for each section are explained.

Decisions and Outcomes is a flexible product. It can be a major part of a comprehensive guidance and counseling program, used as a separate course, or be infused into subject areas such as psychology,

English, human relations and history. The materials can be used in group settings, classrooms, orientation programs, and small group situations.

There are several time options for using *Decisions and Outcomes*. A minimum of 15 class periods may be required to follow all the recommendations in the leader's guide. Time frames can vary to meet the needs of the learners and/or the objectives of the leader.

For additional information contact: H. B. Gelatt, Barbara Varenhorst, Richard Carey, and Gordon P. Miller, New York: College Entrance Examination Board, 1973. The student book is \$2.50; Leader's guide is \$3.00 or free with orders of 20 or more student books.

Abstracts of Selected Practices

Bartsch, Karl; Yost, Elizabeth B.; and Girrell, Kristen W. *Effective Personal and Career Decision Making*. New York: Westinghouse Learning Corporation, 1976.

This activity-based text/workbook combines reading, exercises, worksheets, charts and tables to teach decision-making skills to high school students. Each chapter of the book specifies learning objectives, presents concepts and definitions and provides exercises to help students plan, prepare for, and select a lifestyle suitable to their needs. The chapters are entitled: Making Effective Decisions, Clarifying Your Beliefs and Values, Challenging Your Constraining Beliefs, Identifying Your Interests, Assessing Your Abilities, Selecting Your Goals and Making Plans, Anatomy of a Decision, Taking Charge of Your Life, Setting Objectives and Observing Your Progress and Selecting or Altering Your Environment.

Cost: \$14.50 for the workbook, \$27.00 for class-size set of 20 workbooks

Carkhuff, Robert and Friel, Theodore. *Art of Developing a Career: A Student's Guide*. Amherst, Massachusetts: Human Resource Development Press, 1974.

This guide is to aid junior and senior high school students in their career development, stating the phases of career development and life development are the same. Through this guide, students are aided in expanding their career alternatives, narrowing those alternatives and making a choice, assisted in developing a career program and shown how career development relates to life development. There are 100 exercises throughout the guide outlining the process of career development. *Art of Developing a Career: A Helper's Guide* is designed to be used with this guide.

Cost: \$6.95

Center for Vocational Education. *Self Appraisal for Decision Making and Career Planning: Career Education Teacher's Guide*. Columbus, Ohio: The Ohio State University, 1974. ED 114 696

This loose-leaf notebook, containing suggested learning experiences, resources, evaluation-summary and bibliography, is intended for use primarily with 10th grade students. The eight lesson units concern: exploring the relationship of interests and achievements; attaining greater self-awareness; considering the influence of self-concept and expectations; exploring differences between abilities and achievements; setting goals, considering values; evaluating the decision-making procedure and understanding the interdependence of many factors in acquiring a job.

Cost: \$5.50

Gelatt, H. B. et al. *Deciding*. College Entrance Examination Board, 1972. ED 071 931

This booklet consists of three units that contain activities and exercises designed to present decision-making principles to students in grades 7-9 which they can apply directly to their life choices. This program, tested with 1,200 students, provides information on the importance of values in decision-making, how to gather information before making a decision and various strategies involved with making a decision. A companion piece, *Deciding: A Leader's Guide*, provides information on how to use the materials.

Cost: \$2.50 for student booklet, \$2.00 for leader's guide

Guidance Associates. *Better Choice, Better Chance: Selecting a High School Program*. New York: Guidance Associates, 1975.

This kit, which includes two color filmstrips, two, 12" lp records or two cassettes and a teacher's guide, is designed to help students in grades 8 and 9 select high school courses and, as interests and abilities change, to evaluate these initial course selections. Part 1 introduces the distinctions among vocational, academic, and general courses and discusses the decision-making process based upon individual interests and abilities. Part 2 presents three senior students discussing what their plans had been in junior high school and the decisions they actually made during high school. The teacher's guide includes teaching and discussion materials and filmstrip scripts.

Cost: \$48.50

Harrington, T., and O'Shea, A. *The Harrington/O'Shea System for Career Decision-Making*. Moravia, New York: Chronicle Guidance Publications, Inc., 1977.

This instrument, developed by Dr. Thomas Harrington, professor of counselor education at Northwestern University, and Dr. Arthur O'Shea, chairman of the psychology department at Boston State College, consists of 189 items that survey self-estimates of abilities, interests, occupational choices, school subjects, plans for the future and job values clarification. Field tests and norms involved over 5,000 subjects and 32 different locations in 20 states. CDM delineates norms for many well-defined groups including minorities. The survey and interpretation are free of sexual bias. The survey interpretation considers over 500 occupations. CDM is usable with individuals from 8th grade to adults.

Cost: Prices vary for individualized interpretative report, profile report and self-scoring report.

Johnson, Richard H. *Career Decisions: An Activity and Simulation Program for Middle School Classrooms*. Carbondale, Illinois: Life Career Consultants, 1974.

This tested program assists junior high school students in understanding the educational, occupation and personal aspects of their lives so their decision-making will be smoother and more rewarding. The kit includes charts to give students a visual overview of the decision-making process, a simulation to provide students an opportunity to make decisions and activity cards containing specific directions for conducting the activities. The program is best used as a classroom activity, but can also be used in groups of 12.

Cost: \$35.00 per kit, \$3.00 consumable items refill

Krumboltz, John D., and Sorenson, Don L. *Career Decision Making*. Madison, Wisconsin: Counseling Films, 1975.

This 16 mm, color film is 27 minutes long and designed to help people learn how to make wise career decisions. The film shows how a group of high school students learn the decision-making process through individual and group counseling. The students are guided through eight decision-making steps.

Cost: \$345.00 plus postage, three-day rental—\$25.00 plus postage

Magoon, Thomas M. Developing Skills for Solving Educational and Vocational Problems. *Behavioral Counseling: Cases and Techniques*, Krumboltz, John, and Thoresen, Carl, eds., New York: Holt, Rinehart and Winston, Inc., 1969.

The Effective Problem Solving (EPS) model described in this article as a type of self-directed learning program teaches the individual the steps to be taken in effective problem solving. The model is structured in sequence (following six problem-solving steps) and format (mimeographed parts of arranged sequence of questions). The client responds to the questions and the counselor reviews the client's work. The model is individualized because clients work at their own pace. As part of the material is finished, the counselor reads it as the client continues with other work and although several clients work in the same room, the counselor is able to physically move about responding to client's questions. The EPS content is arranged in 13 parts, two or three mimeographed colored pages to a part.

Cost: \$11.95—book

Parker, Don H.; Parker, Shelby W.; and Fryback, William H.
Decision Making for Career Development. Chicago: Science
Research Associates, Inc., 1975.

This program, which contains four audio-cassette tapes, 30 student response books, and one program guide is designed to provide a series of role-playing situations which will enable students in grades 8-adult to analyze decisions and the decision-making process. The tapes contain narration for one model session and nine role-playing sessions. The student booklets provide a means of follow-up to the role-playing sessions and the program guide gives rationale and procedures for the program. The program can be used in social studies, psychology, and communication classes.

Cost: \$50.00

A List of Additional Resources

Benson, A. *Resource Guide for Career Development of Senior High School*. Minneapolis, Minnesota: Minnesota Department of Education, Pupil Services Section, 1973.

Byrne, Richard Hill. *Building Career Information-Seeking Behavior*. College Park, Maryland: University of Maryland, 1976.

Campbell, D. *If You Don't Know Where You're Going, You'll Probably End Up Somewhere Else*. Niles, Illinois: Argus Communications, 1976.

Cosgrave, G. *Career Planning: Search for a Future*. Toronto: University of Toronto, 1973.

_____. *Career Workbook*. Toronto: University of Toronto, 1973.

Gillespie, Judith A., and Lazarus, Stuart. *Political Issues Skills Kit: Comparing Political Experiences, Experimental Edition*. Washington, D.C.: American Political Science Association, 1975.

- Katz, Martin R. et al. *Simulated Occupational Choice: A Measure of Competencies in Career Decision-Making*. Final Report. Princeton, New Jersey: Educational Testing Service, 1976.
- Koberg, Don, and Bagnall, Jim. *Values Tech: The Polytechnic School of Values, Leading You to a Higher Degree of Self Awareness*. Los Altos, California: William Kaufman, Inc., 1977.
- Lamont, Ken, and Cother, Boo. *Career Guidance—A New Direction for Bend Senior High School: Final Report*. Salem, Oregon: Bend School District 1, 1974.
- Lamont, Ken, and Rice, Naomi. *Guidance Awareness Program: Narrowing the Gap Between Home and School: Final Report*. Salem, Oregon: Bend School District 1, 1975.
- Mitchell, Joyce Slaton. *Free to Choose: Decision Making for Young Men*. New York: Delacorte, 1976.
- Rettig, J. *Careers: Exploration and Decision*. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1974.
- Rossi, R.; Bartlett, W.; Campbell, E.; Wise, L.; and McLaughlin, D. *Using the Talent Profiles in Counseling: A Supplement to the Career Data Book*. Palo Alto, California: American Institutes for Research, 1975.
- Springfield Public Schools. *Resource Unit for Decision-Making Skills Including Values Clarification*. Oregon: Springfield Public Schools, 1974.
- Winefordner, David. *Career Decision-Making Program*. Charleston, West Virginia: Appalachia Educational Laboratory, 1977.

References

- Coleman, Thomas R. *Motivational Workshops for Low Achieving High School Students in Order to Help Them Improve Their Career Maturity*. Nova University, 1975.

- Fletcher, F. "Concepts, Curiosity, and Careers." *Journal of Counseling Psychology*, 13, 131-138, 1966.
- Frederickson, R. et al. *Multipotential—A Concept for Career Decision Making*. ERIC Microfiche. ED 08927
- Gelatt, H. "Decision-Making: A Conceptual Frame of Reference for Counseling." *Journal of Counseling Psychology*, 9, 240-245, 1962.
- Grennhaus, Jeffrey H., and Simon, William E. "Career Salience, Work Values, and Vocational Indecision." *Journal of Vocational Behavior*, 10, 1, 104-110, 1977.
- Herr, Edwin L. "Decision Making and Employability Skills and the Role of Cooperative Work Experience." *Business Education World*, 57, 4, 11-13, 1977.
- Hilton, T. "Career Decision Making." *Journal of Counseling Psychology*, 19, 291-298, 1962.
- Hsu, C. "A Conceptual Model of Vocational Decision Making." *Experimental Publication System*, 8, MS No. 270-276, 1970.
- Jackson, Dorothy J., and Egner, Joan Roos. *Process Verification of a Career Counseling Program*. San Francisco, California: American Educational Research Association, 1976.
- Jepsen, D., and Dilley, J. "Vocational Decision-Making Models: A Review and Comparative Analysis." *Review of Educational Research*, 44, 3, 331-349, 1974.
- Kaldor, D., and Zytowski, D. "A Maximizing Model of Occupational Decision-Making." *Personnel and Guidance Journal*, 47, 781-788, 1969.
- Katz, M. *Decisions and Values: A Rationale for Secondary School Guidance*. New York: College Entrance Examination Board, 1963.
- _____. "Interests and Values: A Comment." *Journal of Counseling Psychology*, 17, 460-461, 1969.

Kelso, Geoffrey I. "The Influences of Stage of Leaving School on Vocational Maturity and Realism of Vocational Choice." *Journal of Vocational Behavior*, 7, 1, 29-37, 1975.

Krumboltz, J. et al. "A Social Learning Theory of Career Education." *Counseling Psychologist*, 6, 1, 71-80, 1976.

Mitchell, T., and Beach, L. *Expectancy Theory, Decision Theory, and Occupational Preferences and Choice*. Technical Report 75-75. Seattle, Washington: University of Washington, 1975.

Nebraska State College. *Educational and Occupational Choice: An Analysis of the Decision-Making Process of Central Nebraska High School Graduates of 1973*. General Report. Lincoln, Nebraska: Nebraska State College, 1975.

Osipow, S. *Theories of Career Development*. New York: Appleton-Century-Crofts, 1973.

Schlossberg, N. "On the Brink: Your Own Career Decision." *Journal of the NAWDAC*, 40, 1, 22-26, 1976.

Stinson, M. "Your Career: Make It a Choice, Not a Chance." *Balance Sheet*, 58, 4, 170-177 & 184, 1977.

Thompson, A. "Client Misconceptions in Vocational Counseling." *Personnel and Guidance Journal*, 55, 1, 30-33, 1976.

Tiedeman, D., and O'Hara, R. *Career Development: Choice and Adjustment*. New York: College Entrance Examination Board, 1963.

Vroom, V. *Work and Motivation*. New York: Wiley, 1964.

Walters, N. *Parents: Key People to Assist in Occupational Decision Making* (Project No. 1000). Final Report, 1974. ERIC Microfiche. ED 106687

Winefordner, D. *Career Decision-Making Program*. Charleston, West Virginia: Appalachia Educational Laboratory, 1977.

Chapter 5

Placement, Follow-Up, Follow-Through, and Employability Skills Practices

Placement, follow-up and follow-through practices consist of two major groups of practices: (1) placement and follow-up procedures, and (2) employability skills. This chapter is subdivided into two parts. Part A reviews and defines placement, follow-up and follow-through procedures including illustrative models and techniques. Part B provides a similar treatment of employability skills. The two-part organizational scheme in no way suggests these two groups of practices should be perceived as separate practices. On the contrary, they are mutually supportive practices. Placement procedures and models provide the core administrative framework, whereas employability skills represent the student abilities and characteristics needed to secure and retain a job.

Part A
Placement, Follow-Up, and Follow-Through Practices

**What are Placement, Follow-Up
and Follow-Through Practices?**

Placement is a service to assist students in taking the next step in their career development. There are two types of placement services—educational and job.

Educational placement provides assistance in educational transition and planning. It includes services designed to help students select courses, special classes, extracurricular activities, training programs, and make overall educational plans. It assists students in obtaining admission to other schools and programs such as technical institutes, colleges, and vocational programs. Assistance in obtaining financial support for training (scholarships, loans, and stipends) is also a key aspect of educational placement.

Job placement assists students in obtaining employment on a part-time or full-time basis. In addition to work entry, it can also provide assistance in changing positions within the same organization and job advancement. Educational and job placement services go hand-in-hand. Effective career guidance should assist students with a well-developed career plan and help them see the relationships between educational planning and career goals. For example, the selection of courses and part-time work should have career planning value and meaning beyond just satisfying immediate needs. Where possible, the counselor should alert students to their potential career development value. For example, students should be encouraged to explore jobs to test their relevance to future career plans. Even the most mundane jobs can offer exploratory opportunities. An alert assemblyline packager can also vicariously observe a great deal about general plant operations which might have value to him in exploring such fields as engineering and management.

In their review of placement definitions, McDonough and Burtnett (1977, p. 69) observed:

What appears clear from these and other definitions of placement is that (1) there is an educational and an occupational dimension to placement; (2) there is a school and job sphere for this activity; (3) there is an in-school and out-of-school focus; and (4) there is a planning process involved, undertaken with the client, in cooperation with others, to attain short-range and long-range objectives for education/work. What also seems clear is that placement is so inextricably bound to the guidance process that it serves as the culminating activity, a finite but continuing program. For, if an individual does not make satisfactory in-school and outside educational and job choices based on his/her interests and abilities; and if post-secondary training, college and/or job and career situations are inappropriate; and if the individual is unaware of labor market trend data, up-to-date occupational information, and hasn't had some contact with the world of work—ineffective and unsatisfactory placement, of all the school leavers (graduates and non-graduates) their dropping out, termination and unemployment may well reflect on the adequacy of the total guidance program. Obviously, the counselor working in cooperation with parent, student, teaching faculty, school administration and local community business, labor and governmental agencies is key to an effective placement program. He/she has to be well trained and knowledgeable about the students, the school program, community job opportunities, occupational and college information, labor market trends and the world of work.

Follow-up is a method (typically via surveys) of obtaining data on the current status of students. It usually focuses on drop-outs or graduates, but can also include others. Follow-up data provides quantitative and qualitative evaluative information for making program modification decisions. For example, if a follow-up survey indicates that students are lacking in specific technical skills required for entry placement, the school might consider modifying the school curriculum to include such skills.

The term follow-up is also used to describe individual short-term job and education placement progress checks on students who

recently have been placed. The purpose of this type of follow-up is to ascertain the placement progress of a student, for example, Did the student obtain the job? Is the student still employed? If yes, were there any adjustment problems? How is John doing in the drafting technology program? Is he enrolled—still in the program? Although in some instances the progress type data can serve the dual purpose of a school-wide survey as well as an individual placement check, it is usually perceived as an immediate, informal check.

Follow-through is defined as the application of follow-up information to current school programs. Effective follow-through is more than just thinking about what should be done, it is doing it. It is an action which should result in improved benefits to students, for example, better placement, more relevant education, improved employability skills, and/or more self-reliance in the labor market. Too often, the follow-up plan breaks down at the point of implementing change because no provisions are made in the plan for follow-through action. Consequently, in many instances excellent data can collect dust. As with follow-up, the term follow-through is sometimes used to designate the school's contacts with employers or training institutions for the purpose of promoting better school-employer working relationships.

Why Have School-Based Placement Programs?

Explaining why placement, follow-up and follow-through services are needed is probably confirming the obvious in view of the heavy stress laid on the youth employment problem over the past 10 years:

The importance of placement programs has been strongly endorsed by virtually all major federal education and work legislation. In fact, a number of federal bills have been proposed specifically on training and placement. Most legislators see job placement as the *bottom line* of education and work programs. The career education movement has further emphasized the placement theme. This is not to suggest that all of career education has paid employment as the terminus, but most laypersons would perceive it as synonymous with paid employment, i.e., jobs and career are the "pot of gold at the end of the (educational) rainbow."

In addition to the federal emphasis, states are rapidly implementing legislation to hold schools accountable for placement. The states of Florida (1973) and Virginia (1975) were the first to enact legislation. A number of other states have similar bills in preparation, for example, Maine, Maryland, and Michigan. See Wasil (1977) for an excellent summary of legislative placement efforts. The wording of state legislation is strong as illustrated by Florida's bill:

On or before September 1, 1974, each district school board shall establish and maintain job placement and follow-up services for all students graduating or leaving the public school system, including area vocational technical centers.

Professional organizations and advisory councils also have been advocates of placement, such as the National Advisory Council on Vocational Education (1972, 1974). The American Personnel and Guidance Association, and the American Vocational Association.

Wasil (1974, p. 32), one of the most vocal advocates and practitioners of placement, sees it as the "keystone of career development . . . the fusing element that is necessary if career development is to be effective." Wasil emphasizes there are several benefits of a placement service such as helping students translate what they have learned into functional reality, guiding the school in relevant curricula revisions, and providing a means for determining the effectiveness of educational efforts. In addition to Wasil's list, professional literature has suggested that a placement service also:

1. Encourages schools to feel more responsible for the futures of their students
2. Improves school-community-industry relationships
3. Provides better accountability for 12 years of public education
4. Encourages students to perceive the school as an important link to training, jobs, and careers
5. Provides data bases for requesting budgets and funding of new programs

6. Displays the school's visible strategy for helping to combat the high unemployment and floundering problem of youth (the youth unemployment rate, typically, has been four times that of adults).
7. Sensitizes the school's faculty and guidance staff to the relationship between education and work and the improvement of curriculum
8. Provides a needed service to employers and the community-at-large
9. Gives students direct accessibility to placement services (they do not have to travel across town to an unfamiliar agency)
10. Fosters early student career exploration, the acquisition of life-long employability, and individual resourcefulness
11. Helps to identify financial assistance for needy students
12. Serves as a mechanism for continued in-service training about the work world for school faculty

An Overview of Current Practices

School-based placement programs are not new. Martin (1977) in his historical review of placement, notes that placement services were established by large city school systems in the early 1900s. In 1904, the Brooklyn Boys School had a part-time and summer job placement service. Boston's Placement Bureau was established in 1914, and Baltimore's in 1928. Stimulated by the bleakness of the Great Depression, Bell published his book, *Matching Youth and Jobs*, in 1940 for the American Council on Education. Ironically, Bell described similar youth unemployment problems as now, four decades ago, but World War II vitiated the problem until the late, post-war years reawakened them.

Placement programs are fast becoming one of the major movements of the seventies. As indicated earlier, many states are contemplating the establishment of local placement programs statewide,

but the majority have not implemented them. Boss et al. (1975, p. 81), conducted a national survey in 1974 showing existence of placement programs. They found that of the 29 states responding, only 18 states actually had initiated programs. They further reported that of the few that had been started, not many demonstrated evidence of "extensive innovation or outstanding features."

A more recent study by Mitchell and Gibson (1977) painted a rosier picture. In their survey of 3,218 schools, 70 percent of the small and large schools and 36 percent of the medium schools reported they had a designated faculty member responsible for placement. Overall, they found that most schools were becoming increasingly conscious of the need to develop school placement and follow-up activities, but at present most school's place more emphasis on college placement than job placement.

One is left with the impression that nationally there is a great deal of lip service but little actual widespread implementation. The only states making progress are those who have shown commitment through state legislation and adequate funding. It is very likely that not much will happen nationally as long as schools are expected to patch placement programs on to existing services without adequate supportive funds, personnel, and resources. The main issue is dollars. Those states who are concerned enough will put money behind placement programs, others will let them ride.

The characteristics of placement programs vary considerably. Some are very comprehensive models including extensive services and staff, whereas others are only skeletal operations of posting training and job opportunities on a central bulletin board for all to grab. In the latter case, little or no personal assistance is provided to students.

Gray (1977, p. 57) in his very down-to-earth review of placement models points out that "job placement is more than getting kids together with potential employers. To claim a place in the high school curriculum, it must be more than a service; it must be a program." He views a comprehensive placement model as containing five elements:

1. *Needs assessment.* A survey of student demand is essential to determine how many students should, and can be served within existing resources. Needs assessment helps establish the parameters of the service.

2. *Job development.* This is defined as all efforts which result in job orders. This could include personal contacts with employers, mailing brochures or letters, speaking engagements, newspaper and radio spots, and referrals through local employment agencies.
3. *Student development.* A comprehensive educational plan is needed to properly prepare students to obtain and hold jobs such as job-seeking skills, work attitudes, appearance, and job performance skills. A sound program requires that students participate in pre-employment preparations. After all, students represent much of the image of your program—if they are perceived by employers as generally poor risks, your program will be adversely affected.
4. *Placement—"the payoff."* Placement, according to Gray, is more than an event (a job hire), it is a process whereby the counselor does all he can to prepare the student for successful placement. It includes the careful preparation of both the student and the employer for the job. Both have a large stake in the outcome.
5. *Follow-up.* This activity, as has been defined before, involves different types of services. In addition to an evaluative program survey study, it is also a process of checking and supporting the placement of a student to insure success. This might require supportive counseling for the student in his job adjustment, trouble-shooting, teaching job retention and job leaving skills, knowledge of fair employment practices, health and safety laws, and benefits.

What to Consider When Installing Placement Programs

A review of the literature has identified 12 considerations in the design of placement programs which are briefly discussed below:

1. *Administrative location of the program.* Should it be administered by the guidance department or by an independent department? There is some variation on this across the country. Some school districts administer the program

through vocational education (for example, Houston, Texas). Others establish it through a separate entity (for example, Akron—Summit County, Ohio) with district-wide linkages, whereas others see it as an integral part of guidance services (for example, Flint, Michigan).

A related issue on location has to do with physical location. Is it better to have a district-wide autonomous program at each high school? There appear to be three different models in existence: (1) centralized district-wide; (2) centralized district-wide with satellite units in each high school; and (3) separate programs in each high school. The decision to use a particular model is often determined by the size of the school district. If there is only one high school within the district, the model is obvious. In larger school districts, many separate programs can present problems in employer referral coordination, i.e., too many schools sending applicants to the same employer thereby creating disgruntled employers. The same problem can occur with centralized district-wide programs with satellite units, unless proper controls are imposed. One way around this is to have a centralized office for job development and job orders which disseminates these to high school units as appropriate.

All models require careful coordination and administration. The physical accessibility for the student is also critical. Students may not use the service if they have to travel. They prefer walking down the hall, which suggests that at least a high school satellite unit be available if one uses the centralized model. Heck and Martin (1977, p. 1) have studied these problems with the Flint, Michigan placement program and report the following:

Three safeguards have been established to assure continuous contact and ease of accessibility between counselor and placement specialist. First, each of the four placement specialists is assigned to one of the school district's four high schools. The specialists are physically housed and coordinated at the central placement office, but they are regular visitors at their respective high schools.

Second, each high school counseling staff is assigned a "placement clerk." The clerk functions both as a communications facilitator between the counselors and the central placement office and as a follow-up coordinator. A clerk assists each high school in its task of providing follow-up information at regular intervals on all graduates. This information is analyzed school by school and district-wide to provide assistance to area employers, curriculum developers, and the community. Third, the placement specialists serve in a consulting and facilitating role to assist counselors and teachers in presenting student placement and career education seminars, employment trends and current placement information.

These efforts further strengthen interrelationships and team participation. As part of a team, counselors expressed some initial anxiety with respect to the many technical and mechanical procedures required. Student placement for work experiences that qualify for high school credit demand attention to details such as working papers, work training agreements, legal responsibility, grading procedures, evaluations, etc. There is much to be learned and carried out in a team situation with duties delegated to the respective team members according to principles of effective management.

2. *Comprehensiveness and magnitude of the program.* To achieve all of the five elements suggested by Gray requires a comprehensive program, which does more than just take job orders and refer students. A quality program should be comprehensive, i.e., teach students employability techniques, coordinate job development and harmonious employer relations, provide student supportive counseling, conduct program evaluation, and consult with school faculty, staff, and administration. If all of these elements are considered, the implications for the magnitude of the program are considerable.

3. *Coordination with other guidance activities.* Placement should not stand alone as an isolated service. It should be viewed as part of a larger comprehensive career guidance program, effectively integrated with other activities such as career exploration, decision-making, and long-range career planning.
4. *Staffing and staff training.* A comprehensive placement program requires at least a half-time, and preferably a full-time coordinator. A full-time secretary for administrative assistance and clerical support is a necessity. Our society encourages paperwork and placement is no exception. There is a mountain of paperwork, for example, employer contacts, referral letters, a systematic filing system, student records, and follow-up data.

Additionally, placement specialists and school counselors from cooperating satellite schools are needed. The number will vary as a function of the magnitude of the service. Flint, Michigan, for example, employs a placement director and four full-time placement specialists who serve 8,000 high school students and approximately 2,000 graduates, 70 percent of whom plan to enter full-time jobs after graduation (Heck and Martin, n.d.). Kosmo and Hartz (1976) have provided a substantial outline of placement staff needs and functions. In addition to cadre staff, they also recommend advisory and steering committees.

An ongoing staff training and professional renewal program is also an essential activity for an effective placement service. Gysbers and Moore (1974), Martin (1977), and Shippen (1977), have addressed this concern. They have identified a list of skills and knowledges needed by placement personnel such as knowledge of school-based, work-oriented programs, entry-level employment requirements, the business community, state and federal labor laws, training opportunities, and community agencies, and skills in public relations, student assessment, human relations, follow-up surveys and employability techniques. Since very few universities teach these skills and knowledges, much of the staff training will have to be obtained through special in-service workshops, seminars, and on-the-job training.

5. *Longevity of student services.* How long should services be maintained after the students have left the school? This has been a long-standing issue for which the literature has no clear-cut guidance. Some placement programs are designed to continue to provide assistance for one year after graduation, but most programs quickly sever the service as soon as possible, due to the flood of clients. Others provide short-term follow-up assistance on an irregular basis. Since the school-to-work transition is a major life event for so many, it would seem imperative that schools extend the services for at least one to three years after the student leaves school. Super, Kowalski, and Gotkin's (1967) *Trial and Floundering after High School*, provides ample justification for this recommendation. They found that the majority of young adults need guidance during this transition. Many procrastinate serious career planning until after they have "hit the streets."
6. *Image of the program.* Nothing can destroy a program faster than a poor image. Although for many readers, discussion of image may be old hat, it is of the utmost importance. Program image refers to how the program is perceived by the various clients, for example, students, employers, the community, parents, and faculty. It should be viewed as an efficient, dependable service which is readily accessible to clients. A weak program can result in many negatives such as disgruntled clients, complaints, and the withdrawal of support. Whereas, a program with a positive image will continue to grow in support and quality.
7. *Student-centered: The heart of a program.* After a program is in operation for a while, there is a tendency to lose sight of its original mission by getting caught up with operational procedures. This is a common problem in organizations where the rules and procedures become end-goals, per se, instead of the mission goals. Program staff should constantly remind themselves of their mission which is to provide placement services to students. This is not to imply that others should not be served, too, such as employers, but the heart of the program has to be students.

8. *Student placement preparation activities.* Bolles (1974, p. 26) has noted that "effective career counselors during this decade will increasingly see their task as that of empowering the job-hunter, rather than merely offering him or her services."

Dudley and Tiedeman (1977) have also referred to this as a "sense of agency," i.e., students acquire a sense of self-reliance and self-direction by becoming masters of their own destinies. In preparing students to be more placeable and job adjustment wise, the program should be designed to offer a number of seminars and mini-workshops. Most of these are slanted toward employability skills such as job interviewing, job seeking, job retention, supervisory adjustment, and job mobility. Campbell (1977) has identified a long list of needed skills based upon surveys of neophyte workers. The Akron-Summit County, Ohio program (1977) as well as others, has developed a number of materials for teaching these skills.

9. *Job development.* Locating jobs for students is a major undertaking. It involves all the efforts of the placement program which result in job orders, for example, personal contacts, letters, referrals, spot announcements, and telephone calls. For guidelines on how to achieve job development, the reader should consider reviewing the National Urban League's 1975 *School to Industry Job Development Program* pamphlet, as well as Shippen and Wasil (1977). Additionally, publications of the U.S. Department of Labor and the *Journals of Employment Counseling and Human Resources* should be helpful.
10. *Follow-up and follow-through procedures.* Follow-up and follow-through should be treated as integral parts of a comprehensive placement program. They provide key information to improve service, but they also necessitate considerable effort and planning for their implementation. Dale (1977) has developed a detailed outline of procedural follow-up activities, for example: follow-up techniques, sampling approaches, data analysis, and the utilization of findings. Other procedural guidelines have been published by Copa, Irvin, and Maurice (1976), Copa and Kleven (1977), and Paul (1975).

11. **Costs.** Attempting to suggest a generalized budget figure to operate a placement program is difficult due to the number of factors which vary across the country, such as salaries, overhead, non-paid volunteer workers, the number of students being served and the comprehensiveness of the program (range of services). As a rule of thumb, personnel costs will probably represent 75-78 percent of the total costs which might help those who are trying to roughly estimate the establishment of a new program. For more accurate figures, it is suggested that those who are serious about establishing a program, consult directors of established programs such as Wasil, Gray, or Martin.
12. **Build your own.** Gray (1977), has wisely suggested that in designing a placement program,

What works one place, seems absurd in another. Build your own program. How? Take the five elements of a comprehensive placement program, decide who is going to do what, and start. Keep in mind two points made earlier. First, the more a part of the ongoing high school program the placement efforts and staff can be, the more success you will experience. Second, in any model, someone needs the flexibility to get out into the business community regularly, as well as have unlimited access to a phone.

This is sound advice. Although a number of models and elements are suggested in this review of placement, no one model is relevant for every situation as each setting is unique. It is true that the suggested models will help you get started. Every program needs to incorporate some modifications to fit unique circumstances as was indicated in the discussion of costs. One word of caution, an experienced consultant is advisable. The cost of a consultant will save a lot of dollars over the long haul.

Peters (1977) advises that a newly created placement program staff can save a lot of time taking advantage of existing forms rather than reinventing the model. There are a substantial number of forms that need to be developed, such as referral letters, follow-up instruments, student file cards, and job development procedures. Most of these have

been painstakingly developed by others and can be modified for individual use. It saves many hours.

An Illustration of a Placement Program

The following placement program was selected to illustrate an existing placement service. Although there were many candidate models to illustrate a placement program, Akron-Summit County, Ohio was selected since it has served as a model for many recently established programs and has a long history of demonstrated effectiveness.

The Akron-Summit County Placement Service was established by Wasil to assist youth in obtaining employment. The service works closely with community agencies, local industry, counselors, teachers, and other school personnel to achieve its mission. Placement services are available on a year-round basis to high school graduates, seniors, and dropouts. The agency maintains active communication with the business world to strengthen educational programs and to respond to employer needs.

The bulk of the service is provided through placement specialists, individuals who have been selected because they have both an educational and a business background. They work with school counselors, teachers, and school administrators to provide students with employment information. They spend at least one-half of their time in the business community seeking employment information. They work to place students in jobs for which they are suited, work with local business and industry to provide an employer with the individual youth who best meets his needs, work with community services in placing youth, work to place disadvantaged youth in job stations, and work on follow-up studies of graduating seniors.

The program serves 19 high school districts and a target population of over 3,000 seniors and high school dropouts. Services are provided to students during their senior year and for one year after they exit school. Thus, students receive two years of pre-employment preparation and continuing education support services. The program works with approximately 5,000 to 6,000 students per year.

Special materials and clinics have been developed in areas identified for youth seeking employment and constitute the core of pre-employment preparation. Pre-employment preparation is provided by teachers, counselors, and placement specialists depending upon the needs of the particular school district. In many cases, all three are involved in a team effort to educate youth as to the skills necessary to seek and obtain employment. Instructional units have been developed for the following:

- "The Interview and You"
- "Your First Pay"
- "The Secret of Getting Ahead in Sales: Your Future, Your Decision"
- "Finding a Part-Time Job"
- "Call Us: Invest in Your Future Growth: Employ Youth"
- "You're Hired"
- "Your Application"
- "What Is a Resume?"
- "Job Hunting Clinic"
- "Wouldn't It be Smart for You to Stay in School?"
- "Bridging the Gap"

The staff consists of a director and five placement specialists. A director coordinates and administers the entire program. A placement specialist coordinates activities between the schools, business and industry. Each placement specialist has a blend of experiences in both the worlds of education and business. Each is knowledgeable concerning placement procedures and available community resources. These individuals utilize this experience to aid the high school graduates or dropouts to find employment and at the same time exhibiting a concern in terms of providing the employer with a productive employee. The model developed out of this program has been used in a number of states as a base for the development of similar

programs. In effect, it constitutes a tested and tried national model. Schools involved include inner city, rural, and metropolitan with almost every conceivable student population mix. The areas it serves are a combination of industrial and rural. The materials developed and the techniques and procedures used were forged on the basis of hard reality. The success of this program points out not only the need for these types of services, but they can be delivered efficiently and effectively with almost any target population, situated in almost any school setting.

Information on the program is available by contacting Mr. Anthony O'Leary, Director, Akron-Summit County Placement Project, Akron-Summit, County Public Schools, 80 W. Center St., Akron, Ohio 44308.

Abstracts of Selected Practices

Azzrin, N. H.; Flores, T.; and Kaplan, S. J. "Job Finding Club: A Group-Assisted Program for Obtaining Employment." *Behavior Research and Therapy*, 13, 17-27, 1975.

This study describes a new program for job-counseling the unemployed, which has been evaluated experimentally in a matched-control design. The program was conducted in a group, and stressed mutual assistance among job-seekers, a "buddy" system, family support and sharing of job leads. Also, the program arranged ways of using want ads, role-playing, telephoning, motivating the job-seeker, constructing a resume and contacting friends. Within two months, 90 percent of the counseled job-seekers had found employment versus 55 percent of the non-counseled job-seekers. All clients who attended the program regularly obtained employment. After three months, 40 percent of the non-counseled job-seekers are still unemployed. The average starting salary for the counseled job-seekers was about a third higher than the non-counseled. The present program appears to be an effective method of helping a greater proportion of the unemployed obtain jobs, more quickly and at a higher salary than they could obtain when they used the usual job finding procedures.

Cost: Information available from authors

Buckingham, L. "Job Placement as a School Program." Baltimore Public Schools Placement Program, Md.: *American Vocational Journal*, 47, 3, 63-64, 1972.

This article describes the Baltimore Public Schools Placement Service-as more than a referral of students to job opportunities. There is a broad cooperation and coordination with teachers, counselors, placement personnel and community employers and agencies. For example the Placement Service and Baltimore Social Service Department work together to help identify and provide assistance to economically disadvantaged students. Also, the Service provides the following: an extensive follow-up to employment program, free, year-round full-time, part-time, temporary and summer job services, and the same services for dropouts as enrolled students. Emphasis is on graduating seniors and dropouts. Services are extended to city schools, vocational-technical high schools, vocational schools and special education centers.

Cost: Information available from authors

Copa, G.; Irvin, D.E.; and Maurice, C. *Status of Former High School Students: Procedure for Local Assessment*. Minneapolis, Minnesota: Minnesota Research Coordinating Unit for Vocational Education, University of Minnesota, 1973. (ED 086 875)

The purpose of this project was to develop and pilot test a feasible procedure for assessing educational and employment activities of former high school students. The procedure, consisting of a set of data collection forms and a computer program to summarize the information for school use, was designed for use by a school wanting an assessment of its former students. Procedure was designed to give local schools more complete information on which to base educational decisions.

Cost: Information available from publishers

Heck, B., and Martin, J. *Extending Counseling Beyond High School*. Flint, Michigan: Flint Community Schools Student Placement Service, 1975.

This one-page article describes the job placement program designed in 1973 at the Flint Community Schools to extend

counseling services to students and to maintain contact with the counselees for one year following high school graduation. This program afforded school counselors an opportunity to expand their counseling role and to extend the continuity of their profession into the adult working lives of their students. The article describes safeguards, shared responsibilities and effective teamwork needed for success of such a program.

Cost: Free

Kosmo, S. J.; Hartz, J. D.; Kreitlow, D. J.; Novak, J. L.; and Hammerstrom, W. A. *Transitional Career Placement in the Rural Schools*. Madison, Wisconsin: Vocational Studies Center, University of Wisconsin, 1976.

This program is designed to give school staff aid in preparing youth for the transition from school to work. It is designed to provide job-finding and job-getting skills and help in obtaining opportunities desired. Specific practice in interviewing, writing letters of application, meeting and talking with employers and techniques for analyzing and assessing opportunities are presented. An additional focus of the program gives placement staff help in increasing the range of placement opportunities for high school graduates, plus specific suggestions for home and community involvement and ways of enlisting cooperation from employers. This program is designed specifically for the rural school and rural community.

Cost: Information available from authors

Krishan, Paul L. *A Manual for Conducting Follow-up Surveys of Former Vocational Students*. Research and Development Series No. 106. Columbus, Ohio: The Ohio State University, The Center for Vocational Education, 1975 (ED 114 625).

Field-tested procedures to collect follow-up data on former students of vocational education programs are described in the document. The procedures presented are designed to facilitate the collection, analysis, and reporting of information on jobs obtained and their relationship to training programs, and income, geographic mobility and the satisfaction of former students. The questionnaire data collection procedures and examples of possible output formats are presented, with eight

figures and 22 tables supplementing the discussion. Field-tested procedures included identification of the population, file preparation, the questionnaire, pre-orientation of the population, mailing sequence, sequence of events and interpretation of data. Advantages and disadvantages of collection follow-up data from teachers as opposed to students are discussed. The development phase of a follow-up of former vocational students in Kentucky includes information on the development of the instrument, data collection and development of a software package for processing and analyzing the data. This, along with examples of the kinds of output and interpretation which may be generated using these procedures, make up the appendix.

Cost: \$3.32 plus postage

Lovejoy, Clarence E. *Lovejoy's College Guide*. New York: Simon and Schuster, Inc., 1976.

This complete reference book to about 3,600 American colleges and universities is designed to aid students planning to attend college. It offers guidance regarding expenses, educational financial aid, U.S.A. federal aid, admission procedures and choosing a college. It includes an alphabetical listing of nearly 500 careers and 22 special programs to facilitate selection of a college according to career objectives. The guide includes individual description and rating of the colleges and universities, listed alphabetically within each state.

Cost: \$5.95

Miller, Susan F. *A Step-by-Step Guide to Job Placement*. Augusta, Maine: Bureau of Vocational Education, Department of Educational and Cultural Services, 1976. (ED 121 988)

This 40-page publication is a procedural guide for educators who want to provide students with job-placement skills. Using placement models developed at Mt. Ararat School, Topsham, Maine, this guide outlines two basic placement models (school-based and placement team) and two alternative approaches (regional center and senior placement assistant). It also suggests various methods for organizing and managing placement programs.

This guide is also designed to teach job-seeking and job-keeping skills and to aid students in locating appropriate employment. It provides sample outlines for counselor visitation forms, employer surveys, resumes and letters of application, phone call forms, mock interview and work games, follow-up cards, evaluation sheets and final evaluation charts.

Cost: \$3.50

National Center for Education Statistics. *Directory of Postsecondary Schools with Occupational Programs*. Washington, D.C.: Department of Health, Education and Welfare, 1973. (ED 079 522)

This directory is the first U.S. Office of Education publication to list public and private schools offering occupational education at the postsecondary level. It is designed to aid students and those concerned with educational and manpower planning. Information for each school includes address, telephone number, county, vendor number, accreditation, eligibility for the Federal Insured Student Loan program and for veterans' education under the Veterans Administration and types of occupational programs offered. The directory should help identify and determine if programs being offered at the local level should be expanded to meet projected demand or curtailed according to the occupation.

Cost: \$3.50

Shippen, S. J., and Wasil, R. A. *Placement and Follow-up*. Lexington, Massachusetts: Xerox Individualized Publishing, 1977.

This publication presents a view of current theory and practice in job placement and follow-up for students and practitioners. Articles by nationally recognized experts in the field of guidance, placement and follow-up are offered under six topics representing components in the process of placement: information, exploration, counseling, placement, follow-up and legislation. The articles represent either the theoretical approach based on research findings, or the "nuts and bolts" approach describing actual practice.

Cost: \$5.99

A List of Additional Practices

Allen, Thomas R., Jr. et al. *West Virginia Guidebook: Job Placement Services: What's Your Need?* Charleston, West Virginia: West Virginia State Department of Education, 1974.

Auburn University. *Development and Implementation of a Statewide Vocational Education Terminate Follow-up System for Alabama. Final Report.* Alabama Occupational Research and Development Unit. Auburn: Auburn University, 1975.

Baltimore County Board of Education. *Western Computer Assisted Placement Service.* Final Report. Baltimore, Maryland: Western Vocational Technical Report, 1976.

Bingner, Charles. *Articulation of Occupational Orientation, Education and Placement in Private and Public Elementary Secondary and Post Secondary Schools.* Sheboygan, Wisconsin: Lakeshore Technical Institute, 1974. ED 115 955.

Bolles, Richard N. "Four Marks for Effective Counseling in the 70's." *Journal of College Placement*, 35, 1, 28, 1974.

_____. *What Color is Your Parachute?* Berkeley, California: Ten Speed Press, 1976. Cost: \$4.95.

_____. *The Three Boxes of Life.* Berkeley, California: Ten Speed Press, 1976. Cost: \$4.95.

Bryan Independent School District. *A Step-by-Step Procedure for Implementing a Computerized Follow-up System.* Bryan, Texas: Bryan Independent School District, 1973.

Buckingham, L. "Job Placement as a School Program." *American Vocational Journal*, 47, 3, 63-64, 1972.

Bureau of Vocational, Technical, and Continuing Education Research Coordinating Unit. *School-Based Job Placement Service Model: Phase 1, Planning.* Harrisburg, Pennsylvania: Pennsylvania Department of Education, 1972.

Campbell, R. E. "Preparing the Neophyte Worker to Cope with Job Adjustment Problems." *Placement and Follow-up.* Lexington, Massachusetts: Xerox Individualized Publishing, 116-129, 1977.

Cava, Karen. *Job Placement Center, Final Report*. Pittsburgh, Pennsylvania: Allegheny Intermediate Unit, 1977. ED 127 582.

Center for Studies in Vocational and Technical Education. *Data Base Establishment and Model Development for a Coordinated Comprehensive Placement System: Final Report*. Madison, Wisconsin: Wisconsin University, 1975.

Chamberlin, William et al. "An Innovative Approach to Job Placement in Dayton Schools." *Phi Delta Kappan*, 56, 9, 57, 615, 1974.

Cheek, Jimmy G. A Strategy for Establishing a School-Based Job Placement Program. *Agricultural Education Magazine*, 47, 3, 63-64, 1974.

College Entrance Examination Board. *Meeting College Costs*. Princeton, New Jersey: College Entrance Examination Board, n.d. Cost: free.

Columbia-Montour Area Vocational-Technical School. *School-based Job Placement Service Model. Final Report*. Bloomsburg, Pennsylvania: Columbia-Montour Area Vocational-Technical School, 1975.

Dade County Public Schools. *Placement and Follow-up Annual Report*. Miami, Florida: Department of Pupil Personnel Services, 1976. ED 137 680.

Dawson, R. G. *Life Skills for Job Success Project*. Los Angeles, California: Los Angeles City Unified School District, 1977.

Dusable Exemplary Project: *Bridging the Gap Between School and the World of Work*. Final Report. Chicago, Illinois: Chicago Board of Education, 1975. ED 115 957.

Fehnel, Barry J., Grande, Joseph J. *School Based Job Placement Service Model*. Final Report. Reading, Pennsylvania: Reading-Muhlanberg Area Vocational-Technical School, 1975. ED 122 078.

Florida State Department of Education. *Guidelines for Placement Services and Follow-up Studies Provided by School Districts*. Tallahassee, Florida: Florida State Department of Education, 1973.

Forney, Deanna S., and Adams, John M. "Alumni: A Resource for Career Development." *Journal of College Placement*, 37, 1, 48-52, 1976.

Gibson, R. L. *School-Based Placement and Follow-up Services: Equal Opportunity Provider*. Bloomington, Indiana: Indiana University, Department of Guidance, 1976. ED 134 715.

Guidance Service, State Department of Education. *Guidelines for Employment Counseling and Placement*. Richmond, Virginia: State Department of Education, 1976.

Hartz, J. D., and Kosmo, S. J. *An Individualized Approach to Career Counseling and Career Placement*. Rural America Series, RD 118/C 3, Columbus, Ohio: The Center for Vocational Education, 1977.

Hohenshil, T. ed. *New Dimensions in Placement Services*. Blacksburg, Virginia: Virginia Polytechnical Institute and State University, Division of Vocational-Technical Education, 1976.

Holder, Harold D. et al. *Evaluation of the Guided Occupational Orientation-Training and Job Placement Project Syracuse City School District*. New York, 1973. ED 113 573

Holt, R. et al. *The Vocational Guidance and Placement Program at Lebanon High School. Final Report*. Lebanon, New Hampshire: Lebanon Public High School, 1975.

Indiana Invitational Conference on Placement. *Report*. Smithville, Indiana, 1975. ED 133 507.

Inglewood Unified School District. *Job Needs Survey Model for Use by Local Education Agencies*. Inglewood, California: Inglewood Unified School District, 1973.

Irish, Richard. *Go Hire Yourself an Employer*. Garden City, New York: Anchor Books, Anchor Press/Doubleday, 1973.

- Keilholtz, L. A. *The Career Skills Assessment Program*. New York: College Entrance Examination Board, 1977.
- Kimmel, K. S. and Drier, H. N. *Career Guidance Resources*. Columbus, Ohio: The Center for Vocational Education, 1977.
- LaMotte, G. E. Michigan Computer Program Matches Jobs and Job-seekers. *American Vocational Journal*. November 43-47, 1977.
- Loree, R. M. *Determination of the Most Effective Procedures for Implementation of School-wide Junior High School Career Exploratory Experiences and for the Placement and Follow-up of all Existing Students K-14*. Evaluation Report. Montgomery, Alabama: Alabama State Department of Education, 1975.
- Los Angeles Unified School District, Division of Career and Continuing Education. *Job Placement Handbook*. Los Angeles, California: Los Angeles Unified School District, 1976.
- Major, E. *Shelby County Alabama's Approach to Comprehensive Placement Services*. Shelby County Schools, Alabama. Final Report, 1975.
- McCarty, V. V. *Job Placement*. Atlanta, Georgia: Atlanta Public Schools and Georgia Department of Education, n.d.
- Nadler, Leonard. "Training People Before Hiring: Sounds Funny but it Saves Money." *Training*, 14, 1, 28-29, 32, 1977.
- Negley, H. H. *Job Placement Primer*. Indianapolis, Indiana: Indiana State Department of Public Instruction, 1975.
- Pope, H. *Mobile County Public Schools Placement Implementation Project*. Final Report. Mobile, Alabama: Mobile County Public Schools, 1975.
- Preston, J. Community Resources and Job Placement. *Florida Vocational Journal*, Tallahassee, Florida: Florida Department of Education, 1977.
- Ray, Douglas M. *Employability Skills Program*. Madison, Wisconsin: Wisconsin Vocational Studies Center, University of Wisconsin, 1976.

Reifsteck, L. Thomas. "A Small Placement Office with Some Big Ideas." *Journal of College Placement*, 35, 1, 46-50, 1974.

Robertson, J. M. *Utilizing Manpower and Follow-up Data: A Perspective for Local Vocational Education Planning*. Columbus, Ohio: The Center for Vocational Education, 1973. Cost: \$2.50.

School Board of Polk County, Florida. *Placement and Follow-up Program*. Lakeland, Florida: School Board of Polk County, 1976.

Seifert, Terry. "Job Bank in the Secondary School." *Occupational Outlook Quarterly*, 20, 2, 28-29, 1976.

Smith, W. P. "The Philosophy for Quality Vocational Education Programs." *Fourth Yearbook of the American Vocational Association*. Washington, D.C.: American Vocational Association, Inc., 1974.

Stimac, M. "It Took a Skills Resume." *Journal of College Placement*, 37, 1, 69-71, 1976.

Thomas, Edward G. "Guidance Techniques for Business Programs." *Balance Sheet*, 56, 6, 266-268, 1975.

Turkington, Keith et al. *The Group Guidance Program: A Group Career Guidance and Job Placement Program for High School Youth (Volume 3—Workshop Training Manual)*. Houston, Texas: Vocational Guidance Service, 1973.

Tuscaloosa County Board of Education. *Tuscaloosa County School System Placement Services for Exiting Students. Final Report*. Tuscaloosa, Alabama: Tuscaloosa County Board of Education, 1975.

U.S. Government Printing Office. *Helpful Hints for Selecting a School or College*. Washington, D.C.: U.S. Government Printing Office, 1977. Cost: Free.

Wagner, J. F., and Wood, T. R. *Placement and Follow-up Literature Search*. Jacksonville, Florida: Duval County School Board, 1974.

Woodsworth, J. G. "Career Guidance through Work Experience."
School Guidance Worker, 30, 2, 4-7, 1974.

References

Brenna, D. W. "Placement Outcomes of Counseled Applicants."
Journal of Employment Counseling, 11, 61-64, 1973.

Cooper, Karen et al. "Job Placement." *Journal of Business Education*, 49, 4, 155-156, 1974.

Copa, G. H., and Kleven, B. A. *Job Selection Patterns: A Linkage Between Vocational Education and the Labor Market*. Minneapolis, Minnesota: Minnesota Research Coordinating Unit for Vocational Education, Department of Vocational and Technical Education, 1977.

Dale, J. R. "Follow-up and Follow-through—The Data Base, The Change Base." *Placement and Follow-Up*. Lexington, Massachusetts: Xerox Individualized Publishing, 107-116, 1977.

Dudley, G. A., and Tiedeman, D. V. *Career Development: Exploration and Commitment*. Muncie, Indiana: Accelerated Development, Inc., 1977.

Ginzberg, E. *The Manpower Connection: Education and Work*. Cambridge, Massachusetts: Harvard University Press, 1975.
Cost: \$15.00.

Green County Board of Education. *The Cooperative Occupational Opportunities and Placement Program. Final Report*. Eutaw, Alabama: Green County Board of Education, 1975.

Jones, C. *An Analysis of Student Follow-up Data for Administrative Decision Making*. Bryan, Texas: Bryan Independent School District, 1974.

Mawyer, S. T. *Five Year Follow-up Survey of Albermarle High School Graduates*. Final Report. Charlottesville, Virginia: Albermarle County Schools, 1975.

McDonough, P. J., and Burnett, F. E. *Placement: Systems and Practices*. In *Placement and Follow-Up*. Lexington, Massachusetts: Xerox Individualized Publishing, 67-82, 1977.

Meehan, M., and Franchack, S. *Evaluation of Three School-Based Job Placement Projects in Pennsylvania. Final Report*. Harrisburg, Pennsylvania: Pennsylvania Research Coordinating Unit for Vocational Education.

Mitchell, M. H., and Gibson, R. L. "Job Placement: Fact or Fiction?" *American Vocational Journal*, October, 39-42, 1977.

The National Advisory Council for Vocational Education. *Sixth Report. Counseling and Guidance: A Call for Change*. Washington, D.C.: The National Advisory Council for Vocational Education, 1972.

The National Advisory Council on Vocational Education. *School to Work Project Report*. Washington, D.C.: The National Advisory Council for Vocational Education, 1974.

National Urban League. *School to Industry Job Development Program*. New York: National Urban League, 1973.

Ohio Department of Education. *Placement Service Brochure*. Columbus, Ohio: State Department of Education, 1977.

Peters, H. J. "Placement Follow-up Process and Counseling." *Placement and Follow-Up*. Lexington, Massachusetts: Xerox Individualized Publishing, 82-107, 1977.

Petrich, B. et al. *Assessment of Felt Needs for Preparation in "Life Skills" of Graduates of Diploma and Associate Degree Programs in the Wisconsin Vocational-Technical, and Adult Education System*. Madison, Wisconsin: University of Wisconsin, Center for Studies in Vocational and Technical Education, 1972.

Somers, G. et al. *The Effectiveness of Vocational and Technical Programs: A National Follow-up Survey*. Final Report. Madison, Wisconsin: University of Wisconsin, Center for Studies in Vocational and Technical Education, 1971.

Strong, M. E.; Boss, R. D.; Kosmo, S. J.; Nelson, E. S.; and Hammerstron, W. A. *Review and Synthesis of Job Placement Literature*. Madison, Wisconsin: University of Wisconsin, Center for Studies in Vocational and Technical Education, 1975.

Super, D. E.; Kowalski, R. S.; and Gotkin, E. H. *Floundering and Trial after High School*. New York: Teachers College, Columbia University, 1967.

Wasil, R. A. "Job Placement: Keystone of Career Development." *American Vocational Journal*, 49, 9, 32, 1974.

_____. *Model for School Pre-employment Activities*. Columbus, Ohio: State Department of Education, 1974.

_____. "Legislation for Placement Services." *Placement and Follow-Up*. Lexington, Massachusetts: Xerox Individualized Publishing, 129-137, 1977.

Watkins, James V., and Landrum, John H. "Don't Tell Me, Show Me." *Journal of College Placement*, 37, 1, 56-60, 1976.

Wirtz, W. *The Boundless Resource*. Washington, D.C.: The New Republic Book Company, 1975.

Yates, Frank P. "Realities Dictate Placement Priorities." *Journal of College Placement*, 36, 4, 61-63, 1976.

Part B
Employability Skills Practices

What Are Employability Skills Practices?

Preparation for work takes more than a causal understanding of a given job. Definite skills must be cultivated. Employability skills are essential for everyone's career maturity, particularly high school youth. Employability skills are defined as the abilities and characteristics, in addition to specific occupational skills, needed for the acquisition and retention of a job. Examples of employability skills are job-hunting techniques, interviewing, filling out job applications, acquiring satisfactory work habits, and developing attitudes that foster successful adjustment to the job environment. Employability skills are often referred to as employment seeking, employment qualifications, employer-employee relations, work effectiveness, job skills, or vocational adjustment.

Theoretically, employability skills are used when students are ready for their first full-time job after high school or other formal education. Usually, though, there are opportunities to try skills through part-time, temporary, or full-time employment. Students who are ready to enter the labor market must demonstrate a sufficient mastery of skills to get that first job, and once employed, be able to keep the job.

Students need to understand what employers will be expecting. Generally, employers want prospective employees to convey: interest, good reasons for wanting a job, stability, maturity, a neat personal appearance, appropriate manners, a pleasant personality, and have a complete job application. Once employed, an employee can be expected to show: concern for productivity, pride in work, responsibility, dependability, good work habits, positive attitudes, an ability to communicate well, and the motivation to get ahead. On the other hand, students must understand the the primary reasons people lose jobs include chronic tardiness and absenteeism,

unwillingness to learn, inability to get along well with peers and/or supervisors, frequently making costly mistakes, no interest in work, and an inability or unwillingness to follow instructions (Craven 1977).

Employability skills can be thought of as having application at the preemployment and the employment stages. During the pre-employment stage, the student job-hunters may have to market themselves through resumes, letters, personal contacts (who can be references or sources of job leads) public and private employment agencies, employment interviewing, job applications, interview follow-ups, understanding conditions of employment, and accepting or rejecting offers. Once employed, the new employee must communicate, through performance, an appreciation of the various non-technical job adjustment requirements such as work habits, rules and standards, prejudice, and peer and supervisory adjustment.

Why Have Employability Skills Practices in the School?

Employability skills accumulate gradually through training and experience. In relation to the other career development areas discussed in this book, employability skills, generally, are best taught after a student has made a fairly firm career decision and prior to or during the placement of the student. This, of course, is ideal. Many students leave school without a sense of purpose regarding employment, yet most have to find work for self-support.

In the long range, employability skills are useful throughout a person's working career as occasions arise for change in employment or delayed entry to the work force. Employability skills are critically important for high school students who lack work experience. High school years are likely to be the only time students have the opportunity to receive formal training in employability skills. While there are numerous self-help materials and a few out-of-school training opportunities, the majority of students will not be apt to follow up on needed skills without assistance. Employability skills equal survival in the job market. Valedictorians as well as dropouts should be well instructed in at least the rudiments of employability skills.

An Overview of Current Practices

Recent high unemployment among our nation's youth, especially minorities, along with the career education movement have led to the development of numerous instructional materials dealing with employability skills. These materials can be classified into three general categories: (1) those that concentrate on one or two aspects of employability skills such as resumes and applications; (2) those that are built in as components of products covering, for example, occupational information and career planning; and (3) those that treat employability skills comprehensively as a major component of a programmatic career guidance program having special compatibility with the entire placement component. Much of what is available is described as assisting slow learners, low-level readers, adult basic education students, and the unemployed. Yet, many practices are very appropriate for average students. Materials range from "good top" pamphlets to sophisticated, multi-media packages. Prices are generally under \$25 for single copies except for some packages which, including a developer's training, can cost a few thousand dollars.

What to Consider When Installing Employability Skills Practices

In choosing and implementing employability skills practices the goal is for all students to achieve at least a minimum set of competencies that will enable them to negotiate, adjust to, and, if necessary, change jobs during their careers. Women who perceive their careers as being in the home, men looking to military careers, and ~~college~~ college-bound students should be cautioned about the special problems of delayed entry into the mainstream of the labor force. Local program designers must make conscious decisions, preferably based on a thorough needs assessment of students, about where to place employability skills training in relation to other career development practices, and keep in mind individual differences among students. If, for example, the best time to learn employability skills is the first semester of the senior year, then students will have sufficient time for practice. Concurrently, there should be emergency provisions for dropouts and special training for the handicapped and other disadvantaged groups.

Employability skills practices need to be closely coordinated with the placement service. This will result in continuity in placing qualified, employable students and will encourage appropriate feedback of information to assure that the employability skills being taught are appropriate and valid for a given school or area.

An exemplary employability skills practice is one that provides high payoff for the student, i.e., the student can sense progress toward a goal through skill-building. The full range of employability skills from knowledge of the job market to mid-career job changes should be included. Opportunities for the student to practice skills in a safe environment prior to joining the job market is desirable. An exemplary practice should be included as an integral part of a comprehensive career guidance program.

An Illustration of an Employability Skills Practice

The *Adkins Life Skills Program, Employability Skills Series*, was selected because of its comprehensive approach. It focuses heavily on current learner experiences and needs in a programmatic fashion.

There are 10 units in this practice that are designed as a structured, but flexible curriculum to meet specific behavioral objectives related to choosing, finding, getting, and keeping jobs. These points are:

"Who I Am and Where I Want to Go"

"Ten Occupational Fields: How Do I Explore Them?"

"Jobs and Training: Beginning the Search"

"Employment Agencies and Personal Contacts"

"Choosing a Good Job for Myself"

"Planning for Personal Goals"

"Developing a Vocational Plan"

"Looking Good on Paper"

"The Job Interview: How to be Effective"

"Keeping My Job: Habits that Help"

This practice is designed to be led by a "Life Skills Educator" who is supplied with a manual for conducting each unit. Materials include student manuals, videotapes, audio cassettes, plus various scripts and forms. Summaries, objectives, and instructional methods are carefully shown. Each unit uses a Four-Stage Structured Inquiry Model in the achievement of student objectives. "The four-stage model is a sequence of learning experiences which are designed to frame the problem in an exciting, motivationally arousing way, dignify what the student already knows about the problem task, add what he needs to know for mastery of the task and give him the experience in translating his knowledge into actions" (Adkins 1973). The units are intended for use by groups of 15-20 students, supplemented by individual counseling. The time required to complete each unit is 12-16 hours. There are 10 goals, 55 objectives, and 179 activities.

The full set of materials costs \$4,800. Training is available from The Psychological Corporation for \$750. Contact: The Psychological Corporation, 757 Third Avenue, New York, New York 10017. Telephone: 212/754-3132.

Abstracts of Selected Practices

Blackledge, W. L.; Blackledge, E. H.; and Keily, H. J. *The Job You Want—How to Get It*. Cincinnati, Ohio: South-Western Publishing Company, 1975.

This 92-page workbook discusses types of action individuals should take in seeking employment, finding and using available resources, making summers profitable, selling abilities on paper and in an interview, etc. It is primarily intended for high school students but is also for individuals desiring a review.

Bolles, Richard Nelson. *What Color Is Your Parachute?* Berkeley, California: Ten Speed Press, 1976.

This illustrated book is designed to assist individuals who in the process of job-hunting. It provides information on topics such as: which methods of job-hunting and career-changing work best, and how to change careers without lengthy retraining. A careful step-by-step plan is described on how to obtain a job on one's own, how to find the jobs that are never advertised and how to choose experts who can help.

Cost: \$4.95/paperback; \$8.95/hardback

Campbell, Robert E.; Wynn, George A.; and Ransom, Robert M. *Coping in the World of Work: Practice in Problem Solving*. Columbus, Ohio: The Ohio State University, The Center for Vocational Education, 1976.

This unit, which includes an instructor's manual, student guides, filmstrip/cassette, transparencies and master copies of usable items for students, is designed to help students in grades 11 and 12 make the transition from school to work. After completing the tested unit, students will be acquainted with various job adjustment problems, familiar with the five-step problem-solving approach and able to use the problem-solving approach in simulated real-life situations. The unit is designed for 10-30 class periods.

Cost: Approximately \$100

Dogin, Y. *Help Yourself to a Job*. Minneapolis, Minnesota: Finney Company, 1977.

This three-volume workbook provides an orderly step-by-step employment, study course for the teenage educable retardant; a broad coverage of specific lessons in all areas of employer-employee relationships; and a source of information for various kinds of jobs. It is designed for a low-reading level audience.

Cost: \$1.50 per volume

Goble, D. Y. *How to Get a Job and Keep It*. Austin, Texas: Steck-Vaugh Company, 1975.

This 63-page guide for students is designed to give practical advice in seeking and maintaining employment. It includes tips

on selecting a job, using various job sources, applying and interviewing for a job. It also includes a self-inventory exercise and personal information form.

Cost: \$1.44

Guidance Associates. *You and Your Job Interview*. New York: Guidance Associates, 1975.

This program, which consists of two full-color filmstrips, each 13-14 minutes long; two 12" lp records or two cassettes and a teacher's guide, is designed to help individuals develop interviewing skills. Part I gives information on interviewing skills through a series of interview situations. Part II presents four different job interview situations. The teacher's guide provides teaching and discussion materials and filmstrip scripts.

Cost: Information available from publisher

Kimbrell, C., and Vineyard, B. S. *Succeeding in the World of Work*. Bloomington, Illinois: McKnight Publishing Company, 1975.

This hardbound book discusses skills and concepts all workers should have to perform effectively and responsibly in any occupational role. It gives instructions on applying for a job, getting along with co-workers, using performance reviews and evaluations, investigating personal values and goals and making proper use of money, credit, banks, taxes, social security and insurance. The four major parts are: Entering the World of Work, Awareness of Personal Responsibilities, Awareness of Consumer Responsibilities and Planning Your Future Responsibilities. Each chapter includes study aids.

Cost: \$11.50

Krusemark, Fred D., Jr., and Leske, Gary W. *Finding Your Best Job*. Minneapolis, Minnesota: Department of Vocational and Technical Education, University of Minnesota, 1977.

This instructional guide for teachers or counselors to help provide job-seeking skills provides information on skills needed to secure a job, especially one's first career job. This job-seeking model presents both idealistic and realistic elements. Idealism

is stressed in the job search and selection process and realism is emphasized regarding one's limitations. Rather than proposing methods appropriate to all students, this guide is designed to encourage instructors to adapt the suggested lessons, worksheet and other teaching/learning activities to fit their unique situations. This guide is divided into three sections: job-seeking skills, instruction, lesson guides, and 110 sample tests for job evaluations.

Cost: Information available from publisher

Singer Career Systems. *Job Survival Skills Program: Participant's Workbook*. Rochester, New York: Singer, 1973.

This 61-page participant's workbook is designed to be used with other materials and activities of the Job Survival Skills program, a program to increase the prospective employee's ability to understand and use the personal and interpersonal skills necessary in getting and keeping a job. Each of the chapters includes readings, exercises and worksheets.

Cost: \$1.50

Stanat, K. W., and Reardon, P. *Job Hunting Secrets and Tactics*. Milwaukee, Wisconsin: Raintree Publications, Ltd., 1977.

This 220-page paperback of job tips for adults focuses on information on college placement centers and employment agencies, qualifications, resumes, interviews, and "selling oneself."

Cost: \$4.95

A List of Additional Practices

Bakeman, M. *Job Seeking Skills Guide*. Minneapolis, Minnesota: Multi-Resource Centers, Inc., 1974.

_____. *Job Seeking Skills Workbook*. Minneapolis, Minnesota: Multi-Resource Centers, Inc., 1972.

_____. *Job Seeking Skills Reference Manual*. Minneapolis, Minnesota: Multi-Resource Centers, Inc., 1971.

- Baltus, R. *Personal Psychology for Life and Work*. New York: McGraw-Hill, 1976.
- Berlye, M. *Your Career in the World of Work*. Indianapolis: Howard K. Sams and Company, Inc., 1975.
- Bolles, R. *The Quick Job Hunting Map*. Berkeley, California: National Career Development Project, 1975.
- Dauw, Dean C. *Up Your Career!* Prospect Heights, Illinois: Waveland, 1975.
- Despard, Dale, and McCadden, Jerry. "Student Job Problems? Help's On the Way." *American Vocational Journal*, 50, 9, 20-22, 1975.
- General Motors Corporation. *Can I Get the Job?* Detroit: General Motors Corporation Public Relations Staff, 1973.
- Heck, Edward J., and O'Neill, James. *Job Interview Training Manual*, 1976. ED 137 616
- Independence Community School District. *Employability Skills Handbook: Senior High*. Des Moines: Independence Community School District, 1975.
- Irish, R. *Go Hire Yourself an Employer*. Garden City, New Jersey: Anchor Books, 1973.
- Jacobson, T. *Knowledge Needed to Obtain Work*. Chicago: Science Research Associates, 1973.
- Lasmet, H., and Walsmith, G. *Applying for a Job*. San Diego: San Diego County Board of Education, 1974.
- Learning Resources Center, Virginia Commonwealth University, *You're Hired! Getting the Right Job for You*. Austin, Texas: Instructional Materials Services, Division of Extension, The University of Texas at Austin, 1973.
- Richter, D. *Occupational Essentials: Skills and Attitudes for Employment*. Rockford, Illinois: Johnson Press, Inc., 1973.

- Roskos, F. *Preparing for the World of Work*. Merrill, Wisconsin: F. R. Publications, 1975.
- Schapiro, J. *The Jobs Book: How to Find and Keep a Job (SCOPE/Job Skills I)*. New York: Scholastic Book Services, 1976.
- Schneider, B. *Getting and Holding a Job*. New York: Frank E. Richard, 1966. (Revised 1974.)
- Turner, R. *Holding a Job*. Chicago: Follett Publishing Company 1974.
- Vavrek, Michael. *How to Be a Better Job Hunter*. Portland, Oregon: National Association of Student Personnel Administrators, 1976.
- Vocational Curriculum Management Center. *Job Finding Kit*. Olympia, Washington: Vocational Curriculum Management Center, 1972.

References

- Adkins, W. R. "Life Skills Education for Adult Learners." *Adult Leadership*, 22, 2, 55-58, 1973.
- Campbell, R. E. "Preparing the Neophyte Worker to Cope with Job Adjustment Problems." In *Placement and Follow-Up*. S. J. Shippen and R. A. Wasil, 1977.
- Craven, Linda. "Job Skills are Not Enough." In *Industrial Education*, 66, 2, 32-33, 1977.
- Feild, H. S. and Holley, W. H. "Resume Preparation: An Empirical Study of Personnel Managers' Perceptions." *The Vocational Guidance Quarterly*, 24, 3, 229-237, 1976.
- Ferrin, Richard L., and Arbeiter, Solomon. *Bridging the Gap: A Selection of Education-to-Work Linkages*. New York: College Entrance Examination Board, 1975.
- Garbin, A. P.; Jackson, D. P.; and Campbell, R. E. *Worker Adjustment: Youth in Transition from School to Work*. Columbus, Ohio: The Ohio State University, The Center for Vocational Education, 1967.

Haccoun, Robert R., and Campbell, Robert E. *Training Methods and Intervention Strategies Relevant for Work Entry Problems of Youth*. Columbus, Ohio: The Ohio State University, The Center for Vocational Education, 1972.

Hoyt, Kenneth; Evans, Ruppert; Magnum, Garth; Bowen, Ella; and Gale, Donald. *Career Education in the High School*. Salt Lake City: Olympus Publishing Co., 1977.

Koschnick, Kay, and Ludovic, Stephen. *World of Work*. Syracuse, New York: New Readers Press, 1975.

Loughary, John W., and Ripley, Theresa. *Career Survival Skills: Focus on Affective Career Education*. Teacher's Manual. Columbus, Ohio: Charles E. Merrill Publishing Company, 1974.

Lumsden, H. H., and Sharf, J. C. "Behavioral Dimensions of the Job Interview." *Journal of College Placement*, 34, 63-67, 1974.

Northcutt, N. "Adult Functional Competency: A Summary." In *The Adult Performance Level Study*. Austin, Texas: University of Texas, 1974.

O'Neil, S. L. *Occupational Survival Skills: Implications for Job Maintenance and Mobility*. Champaign, Illinois: University of Illinois, 1976.

Porreca, A. C., and Stallard, J. J. *Common Affective Domain Competencies of Students among Vocational Areas*. Knoxville, Tennessee: Tennessee Research Coordinating Unit, 1976.

Studwell, J. S. "How to Score in an Interview: Some Expert Tips for Eager Job Seekers." *Northliner Magazine*, 7, 3, 24-25, 1975.

Chapter 6

Career Guidance Equity Practices

Until recently, special interest groups such as women, minorities and special needs, had not played an equitable role in society. However, political and social forces are now afoot to gain an equitable role for these groups. Society must understand that it must adjust to accommodate these groups and recognize the attending roles and responsibilities necessary to bring about equity.

In turn, these interest groups need updated information and skills to deal satisfactorily with new opportunities available to them. Concurrently, our courts of law are calling for relevant education experiences and life role preparation for "all" students. This was so eloquently coined by Lilly (1970) as "zero reject concept" (in short, relevant education and occupational preparation for all students).

People in the special interest groups mentioned above follow the same career development patterns as regular secondary students. Although these groups cannot expect to execute similar plans, it is essential to develop special career planning strategies for these groups. Therefore, separate treatments of methods for these groups will include:

- A. Sex-Fair Practices for Women
- B. Career Guidance Practices for Special Needs Populations (Handicapped, Disadvantaged, Culturally Diverse, and Gifted and Talented)

Part A
***Sex-Fair Career Guidance Practices for Women
of Secondary School Age***

**What Is Sex-Fair Career
Guidance for Women?**

Title II of the 1976 Educational Amendments (p. 53831, *Federal Register*, October 31, 1977) defines several terms which apply to secondary career guidance practices for women:

- (A) "Sex discrimination" means any action which limits or denies a person or a group of persons opportunities, privileges, roles, or rewards on the basis of their sex.
- (B) "Sex stereotyping" means attributing behaviors, abilities, interests, values, and roles to a person or group of persons on the basis of their sex.
- (C) "Sex bias" means behaviors resulting from the assumption that one sex is superior to the other.

According to Harrison and Entine (1976) there are career guidance practices for women as classes, workshops, and seminars. The purposes of the practices are to:

1. Gather information about career options and disseminate this information to clients and community.
2. Offer vocational aptitude and achievement testing and utilize results in counseling sessions.
3. Offer assistance for personal and family problems.
4. Offer job placement and job development activities.

Harrison and Entine (1976) also reported findings in a national survey conducted by the American Institutes for Research in 1974 in which 367 programs participated. Of those that participated, 34 percent were from four-year colleges and universities, 20 percent from community colleges, 18 from private groups and agencies (for example, YWCA, YMCA), and only 12 percent from adult public schools (high school extensions). Thirty-two percent of the surveyed programs indicated they had programs designed specifically for women. Although this figure is very low, an even lower percentage is suspected in secondary public schools. Information clarifying the actual status of secondary practices will be forthcoming from the Women's Educational Equity Communications Network Project at the Far West Laboratory in San Francisco.

Sex-fair career guidance practices for women in secondary schools have goals of understanding self, interrelationships with others and acquiring knowledge and planning for life roles, with an emphasis on the work world. Some current programs include practices for women to help clarify their roles in the home, school and community. Others deal with communicating the needs of women as they explore and enter non-traditional roles.

Why Have Sex-Fair Practices for Women in Schools?

Women now constitute the largest under-utilized, and in many instances, untapped human resource in the United States, and yet they are faced with two critical barriers to achieving career development: (1) confused self-expectations about their life career roles; and (2) societal restrictions which limit career planning, preparation, and implementation, especially in non-traditional occupations.

In a survey conducted by Prediger, Roth and Noeth (1973) significantly larger numbers of high school females than males found career information helpful. The survey showed that out of 9,000 eleventh graders polled who used career guidance, 50 percent of the females as compared to 39 percent of the males said some of the occupational information was helpful to meet their immediate and future career planning needs. In addition to occupational information, a number of other factors influenced secondary school females in their career planning. Vetter (1974) identified eight of the most common factors:

1. Intention to marry
2. Time of marriage
3. Reason for marrying
4. Husband's economic situation
5. Husband's attitude toward his wife's working
6. Family finances
7. Social class, education, and occupation of parents
8. Values

These factors and the changing work patterns of females which have developed over the past half-century, provide an obvious justification for sex-fair career guidance. More and more women are working outside the home, for a longer period of time and in an increasingly wide array of fields (Osipow 1975). Yet, numerous studies have shown that women expect their primary source of future satisfaction to be their marriage. In one study, adolescent females (aged 12-14) showed concern for personal achievement and self-development. However, by age 16 they indicated the importance of marriage and motherhood (Cook and Sone 1973). Therefore, besides occupation, marriage and parenthood have been conflicting influences for young women. Surveys have, on the other hand, shown males have not indicated such a change from personal goals to fatherhood. In fact, occupation and recreational pursuits have traditionally shaped a young man's identity.

Another aspect of women's identity relates to their occupational self-esteem. Historically, many women have occupied low self-esteem jobs which negatively affect their perceived personal worth as well as providing poor role-models for their younger counterparts. A number of factors have contributed to this, such as unemployment, inappropriate assignments and responsibilities, pay inequities and discriminatory supervisory practices. In many instances, the above factors have led to dissatisfied work histories manifested by impaired co-worker relations, decreased work-role longevity, minimal pay increments, and/or advancements.

Career guidance cannot be viewed as a panacea for all of these unfulfilled needs, since many needs extend beyond the purview of the school. However, some of these injustices are appropriate for school curriculum-study. If these discriminatory practices are not dealt with in the school environment, the injustices are perpetuated. Consequently, guidance services for high school females should be geared to assistance with problems such as preparing multiple roles, improving self-esteem, becoming aware of legal rights and developing assertive behavior. Additionally, female students should also receive benefits of other standard career guidance practices (appropriate for either sex) for example, techniques designed to help acquire exploration, decision-making and job-seeking skills. Many of these are identified in the subsequent sections of this chapter.

An Overview of Current Practices

Despite the abundant literature and legislation emphasizing women's concerns, secondary schools are slow to initiate career guidance practices for women. For instance, even with the development of counseling centers for women in most major U.S. cities, few schools and centers are forming contractual agreements to combine resources and cooperatively provide necessary services and experiences for meeting the career guidance needs for secondary school females. And even where centers do exist, programs in consciousness-raising activities are designed primarily for middle socioeconomic-class women only. Those courses which do deal with the needs of lower socioeconomic-class women have programs limited to coping and survival skills. Practices for high socioeconomic status are practically nonexistent. Where cooperative efforts do exist between agencies and school districts, there are more participants in practices.

Techniques used in providing sex-fair guidance often deal with the planning and development of life career roles common to young women leaving high school and non-employed women entering the world of work. Women's Center classes may be held during the day or evening, over a lunch hour or may last from a few days, a month, or a year. Also, classes or workshops which use more innovative approaches might be held in a variety of community settings. Some programs are providing services to women in their homes through the use of telephones, mobile vans, cassette tapes and home-study correspondence courses.

Those techniques which are being used in the secondary school include a variety of models. One common approach is to establish small or large group practices with all-female classes. Another is a mixed-group activity in family relations, communications and social studies classes. Counselors are infusing methods to eliminate sex-bias and stereotypic thinking in personal growth and vocational development group processes. Health-related courses dealing with the issues of parenting focus upon women's practices as vehicles for planning personal roles which relate to career decisions.

Many materials on the vocational development of women have been published by education agencies at the state and local levels, the U.S. Office of Education, the U.S. Department of Labor, professional associations, and commercial publishers. Practices and programs have been funded to establish a foundation for educational and vocational awareness and exploration throughout the country. Books, kits, films, games, posters, and tapes are available by varying time intervals at costs ranging from \$0.50 to over \$1,000.

What to Consider When Installing Sex-Fair Career Guidance Practices for Women

When career guidance practices for women are being considered for installation, several basic questions need answering.

1. To what extent do students, staff, and community members demonstrate sex-bias, stereotyped thinking, and sex discrimination?
2. After some degree of consciousness raising, to what degree do students, staff, and community members recognize need for change?
3. What resource persons and materials are available to address identified needs of these populations?
4. What methods are most efficient to address the identified needs?
5. How will the implementation of methods and resources be evaluated?

6. To what extent will commitment be continued to use the results of evaluation for future planning and sex-fair career development for women?

According to Hilliard (1976), when planning a curriculum:

1. Point out sex stereotyping as it occurs in curricular materials (compare the stereotyping to the reality of student's lives).
2. Encourage students to point out and discuss sex stereotyping whenever and wherever they encounter it.
3. Plan a series of projects for students to find and develop bias-free information and materials for class use, for example, pictures, career possibilities, biographical, and historical information.

Also, according to Hilliard (1976), counselors planning to provide sex-fair guidance should:

1. Examine their own counseling practices and methods to test interpretation which may convey to students that certain roles or careers are more appropriate to one sex than to another.
2. Screen tests for sex-bias using guidelines developed in the study done by the Department of Health, Education, and Welfare, and the National Institute of Education.
3. Bring in persons with non-traditional jobs to talk to students.
4. Develop sex-fair counseling materials.

Illustration of a Sex-Fair Career Guidance Practice

Sex-Fairness in Career Guidance, a learning kit program, provides strategies for developing and conducting workshops, teaching counselor education, developing a career education syllabus, and a sex-fair guidance library. The kit was carefully planned and tested in

secondary and post-secondary schools and provides a variety of instructional techniques to achieve curriculum objectives with a broad range of student populations.

This kit presents materials to help eliminate sex-role stereotyping and sex-bias when making a career choice. It consists of a facilitator guide, pre-postassessment techniques, resource spirit masters for duplication, transcripts of counselor-client interactions, role-play scenarios, and an audio-tape of four counseling interviews.

The facilitator manual is organized into four chapters. The manual is comprised of a set of self-administered curriculum materials to aid in the elimination of sex-role stereotyping and sex bias in the process of career choice. These materials are organized into four sections.

1. *Orientation to Sex Fairness* is an introduction to the dual role system which limits career and other life choices for both men and women. It addresses the traditional family and occupational roles of both sexes, their antecedents and consequences, and other current challenges to the system.
2. *Recommendations for a Comprehensive Sex-Fair Career Guidance Program* presents strategies a counselor can take in developing self-awareness, interacting with clients individually or in groups, and working with others in the client's environment—parents, spouses, teachers employers and policymakers. A perspective on sex-fairness is discussed with recommendations and suggestions for each of the components of a comprehensive guidance program.
3. *Guidelines and Recommendations for Sex-Fair Use of Career Interest Inventories* are described which allow the counselor to identify sex bias in career interest inventories, and to minimize bias in administering, reporting, and interpreting these inventories. The NIE guidelines for assessing career interest inventories are interpreted from a technical perspective.
4. *A Resource Guide* is included to supplement the practice of addressing sex-fair issues. Included in the guide are reading, and audiovisual materials, and an annotated

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bibliography. The bibliography consists of information on sex role stereotyping and sex-fair counseling, career guides, activities for counselors and educators, and organizations and agencies providing information and assistance.

The practice is limited in that it focuses primarily on issues of sex-fairness. Other issues which are not fully discussed, but which do influence the limitations of a person's career choice are: age, ethnicity, religion, national origin, and socioeconomic status. The interaction of these factors with gender may produce an even more limiting effect on a person's career choice. These interactions are discussed but require further exploration to deal with the major needs of individual clients. The assessment devices included for an aid to the reader to increase involvement and test understanding have not been tested for reliability and validity and should not be used as standardized measures of the degree of understanding of the concepts.

The materials in the learning kit are primarily designed to address issues of sex-fairness, and can be used to develop sex-awareness, orient clients, run career guidance workshops, teach counselor education courses, develop a syllabus for career education courses, and develop a sex-fair career guidance library.

Although the materials are primarily designed for use by professionals in secondary and post-secondary educational settings, the curriculum also contains materials which could be used by:

- 1. Students in high school or college**
✓ vocational rehabilitation counselors
- 3. Instructors of adult education courses**
- 4. Parent-Teacher Associations**
- 5. Counselors in community counseling services**
- 6. Private clinicians**
- 7. Personnel directors in private industry**

The kit was developed by Linda B. Stebbins, Nancy L. Ames, and Ilana Rhodes of Abt Associates, Inc., Cambridge, Massachusetts. The cost of the practice is \$15.00 plus postage.

Abstracts of Selected Practices

American Personnel and Guidance Association, Film Department, Washington, D.C.: American Personnel and Guidance Association, 1977.

These films provide an opportunity for the audience to become involved while they explore their own feelings and reactions as the films/vignettes, depict real-life situations. After each vignette, the film is stopped while the audience discusses the life situation they have just experienced.

"Assertive Training for Women" deals with interpersonal relationships. Part I is for high school and college students and Part II is for college-age and older women.

Cost: \$250.00 or \$25.00 rental fee per day

"Back to School, Back to Work" focuses on counseling women in transition from housewife to student or from mother to career women.

Cost: \$250.00 or \$25.00 rental fee per day

"The Maturing Woman" is designed to help identify attitudes and beliefs about getting older.

Cost: \$300.00 or \$30.00 rental fee per day

Center for Human Resources. *Equal Vocational Education*. Houston: University of Houston, 1976. (ED 133 464)

Educators in Texas concerned with studying vocational education problems of women provided funds to develop this model program for Texas schools. It was intended to eliminate effects of past discrimination in technical and industrial vocational programs. This model, a self-contained classroom presentation includes a booklet of student materials containing five different

activities; a game, a slide/tape presentation, three case studies ("Was This Woman Prepared for Her Future?" for example) and a discussion of some labor force data from the Women's Bureau of the U.S. Department of Labor. All students receive a booklet, "What's in Your Future—Will You Plan It or Just Let It Happen?" This project was supported by local industry and unions.

Cost: \$4.67

Ellis Associates, Inc. *Expanding Nontraditional Opportunities in Vocational Education*. College Park, Md.: Ellis Associates, Inc., 1977.

This resource is a set of three, in-service training practices on nontraditional exploration roles which exist for youth making decisions. The in-services for staff working with students are: approaches to expanding nontraditional opportunities in vocational education, barriers to expanding nontraditional opportunities for vocational education students, and legislation addressing equal opportunity in vocational education and employment.

Cost: \$11.37 plus postage

Encyclopaedia Britannica Educational Corporation. *Women at Work: Change, Choice, Challenge*. Chicago: Encyclopaedia Britannica, 1977.

This 19-minute, 16 mm sound film which can be used for career education or women's studies, presents on-the-job profiles of women in a variety of careers including traditionally male-dominated ones. It explores the attitudes that direct women toward particular career choices and indicates some of the problems both men and women encounter as co-workers and in competing for jobs.

Cost: \$270.00. Rentals are available

Farmer, Helen S.; Backer, Thomas E.; and Phelps, Ann. *Career Options for Women*. Vols. I, II, and III. New York: Human Sciences Press, 1977.

The three volumes of *Career Options for Women* are entitled, "A Counselor's Source Book." They are designed to be companions to currently available texts in career guidance and counseling. The emphasis is on recent advances in counseling on up-to-date information about women's participation in the labor market and about current education and training opportunities. An effort was made to identify important resources for further information on all topics mentioned. Included is a synopsis of the major scholarly materials about women and the world of work. Guidance is given regarding work problems and their solutions for women in the seventies.

Cost: \$28.00 (three volumes)

Guttentag, Marcia and Bray, Helen. *Undoing Sex Stereotypes: Research and Resources for Educators*. New York: McGraw-Hill Book Company, 1976.

This book contains a description of a research nonsexist intervention including (1) a primary student survey for sex-role beliefs and attitudes about occupational, familial, and socio-emotional roles of men and women, (2) staff designed and tested curriculum packets for elementary and secondary students, (3) teacher training sessions, and (4) stability and change results in students sex-role stereotyping for both students and staff.

Cost: \$5.95

Jongeward, Dorothy and Scott, Dru. *Affirmative Action for Women*. Reading, Massachusetts: Addison-Wesley Publishing Company, Inc., 1975.

This book is designed as a practical guide for women and management in learning about current legislation, the status of women in organized religion and government, and the special problems of black women in organizations. Included also are strategies for positive change, a model affirmative action program, seminars for career women, and how to eliminate sexist language in writing.

Cost: \$5.95

Phelps, Stanlee, and Austin, Nancy. *The Assertive Woman*. San Luis Obispo, California: Impact Publishing Company, 1975.

This book is designed to teach women to develop assertive skills to complement their heightened awareness of changing values and roles. It can be used as an individual workbook or for a group of 7 to 15 women, as it includes an AQ (assertiveness quotient) test, checklists, resources, examples and exercises. It can be used with sophomore, junior, senior high school and adult women.

Cost: \$3.95

Scholtz, Nelle T.; Prince, Judith S.; and Miller, Gordon, P. *How to Decide: A Guide for Women*. New York: College Entrance Examination Board, 1975.

This workbook for women from college through retirement is designed to increase women's decision-making abilities and develop a broader concept of women's roles and emerging life patterns. The exercises and activities are generally drawn from actual life experiences and are designed to be used effectively in both individual and group settings such as consciousness-raising sessions, women's studies courses, adult education curriculums, groups and counseling and therapy groups.

Cost: \$5.95

Winter, Elmer. *Women at Work: Every Woman's Guide to Successful Employment*. New York: Simon and Schuster, 1967.

This book is designed to be a comprehensive, practical guide for women already working, looking for a job or just beginning to explore possibilities of having a career. The book is organized into five major parts: (1) The Preliminaries, (2) The Seven Working States in a Woman's Life, (3) How to Get the Most Out of a Job, (4) A Treasury of Job Opportunities, and (5) On Your Own.

Cost: \$5.95.

A List of Additional Practices

- American Association of School Administrators. *Sample Policy for Sex Equality in Education; Sex Equality in Educational Administration; Sex Equality in School*. Arlington, Virginia: American Association of School Administrators, 1975.
- Appalachia Educational Laboratory, Inc. *Career Information. A Guide for Exploring Career through Worker Traits*. Charleston, West Virginia: Appalachia Educational Laboratory, Inc., 1976.
- Bem, S., and Bem, D. *Training the Woman to Know Her Place: The Social Antecedents of Women in the World of Work*. Harrisburg, Pennsylvania: Pennsylvania Department of Education, 1974.
- Binders, E., and Shulamith, R. *Careers for Peers*. Washington, D.C.: Wider Opportunities for Women, 1975.
- Birk, J., and Tanney, M. *Career Exploration for High School Women*. College Park, Maryland: University of Maryland, 1972.
- Birk, J. *Providing Life/Career Planning for Women and Girls*. Maryland: University of Maryland, 1976. Cost: Approximately \$4.00.
- Bostick, N.; Kaspar, P.; and Sallan, N. *How to Deal with Sex Role Stereotyping at a School Board Meeting, in a Workshop, in the Classroom*. Cupertino, California: Choice for Tomorrow, 1976. Cost: \$2.50.
- Brenner, M. "Management Development for Women." *Personnel Journal*, 51, 165-169, 1972.
- Burkhardt, C. et al. *Involving Significant Others in Career Planning: A Counselor's Handbook*. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1977.
- Butler-Nalin, K.; Lockheed, M.; Ekstrom, R.; Donlon, T.; and Clemson, E. *A Manual for Identifying Sex Bias Explicit in the Content of Test Items*. Princeton, New Jersey: Educational Testing Service, 1975.

Campbell, R. E. et al. *Career Guidance: A Handbook of Methods*. Columbus, Ohio: Charles E. Merrill Publishing Company, 1973. Cost: \$13.95.

Carlson, D. *Girls Are Equal Too*. New York: Atheneum Press, 1974.

Feminists Northwest. *Whatever Happened to Debbie Kraft? An Awareness Game for Educators, Counselors, Students, and Parents*. Seattle, Washington: Feminists Northwest, 1975. Cost: \$0.75.

Fenton, D. *Ms. - Attorney*. Philadelphia, Pennsylvania: Westminister Press, 1974. Cost: \$5.50.

_____. *Ms. - M.D., D.X.* Philadelphia, Pennsylvania: Westminister Press, 1975. Cost: \$5.50.

Fox, Lynn. *Changing Behaviors and Attitudes of Gifted Girls*. A paper presented at APA, Washington, D.C., September 7, 1976. ED 138 008. Cost: \$1.67.

Granschow et al. *Practical Career Guidance, Counseling, and Placement for the Noncollege-Bound Student: Review of the Literature*. Palo Alto, California: American Institutes for Research in Behavioral Sciences, 1973.

Golden, G., and Hunter, L. *In All Fairness: A Handbook on Sex Role Bias in Schools*. Berkeley, California: Far West Laboratory for Educational Research and Development, 1974. Cost: \$5.00.

Guidance Associates. *Jobs and Gender*. New York: Guidance Associates, 1971.

_____. *Women at Work: Choice and Challenge*. New York: Guidance Associates, 1975.

Guttentag, Marcia and Bray, Helen. *Undoing Sex Stereotypes*. New York: McGraw-Hill, 1976.

Intercom. "A Web of Images." *Intercom*, 81; 8-11, 1976.

Klever, A. *Women in Television*. Philadelphia, Pennsylvania: Westminister Press, 1975.

- McCune, Shirley et al. *Implementing Title IX: A Sample Workshop*. Washington, D.C.: Resource Center on Sex Roles in Education, National Foundation for the Improvement of Education, 1976. Cost: \$3.75.
- McLaughlin, Gerald W. et al. "Socioeconomic Status and the Career Aspirations and Perceptions of Women Seniors in High School." *Vocational Guidance Quarterly*, 25, 2, 155-162, 1977.
- Mitchell, J. *I Can Be Anything—Careers and Colleges for Young Women*. New York: College Entrance Examination Board, 1975.
- _____. *Other Choices for Becoming a Woman*. New York: Delacorte Press, 1974. Cost: \$7.95.
- _____. *Other Choices for Becoming a Woman: A Handbook to Help High School Women Make Decisions*. Rev. Ed. New York: Delacorte Press, 1976. Cost: \$7.95.
- Morris, Jane. "Exploring Nonconventional Careers for Women." *School Counselor*, 23, 2, 127-131, 1975.
- National Foundation for the Improvement of Education, The. *Today's Changing Roles: An Approach to Non-Sexist Teaching*. Washington, D.C.: National Foundation for the Improvement of Education, The., 1974.
- O'Dell, Frank et al. *Values, Decisions, Careers: A Group Guidance Program for Girls*. Cleveland, Ohio: Cleveland State University, 1973.
- Osipow, S. "Vocational Behavior and Career Development." *Journal of Vocational Behavior*, 9, 2, 129-142, 1976.
- Pathescope Education Films, Inc. *Non-traditional Careers for Women*. New Rochelle, New York. Cost: \$46.00.
- Place, I., and Armstrong, A. *Management Careers for Women*. Louisville, Kentucky: Vocational Guidance Manuals, 1975.
- Rapoza, R., and Blocher, D. "The Cinderella Effect: Planning Avoidance in Girls." *Counseling and Values*, 21, 1, 12-18, 1976.

Robertson, M. et al. *Staff Awareness: Racial, Socioeconomic, Sex Stereotypes Limit Career Potential*. Columbus, Ohio: The Center for Vocational Education, 1975.

Stone, E. *How to Choose Your Work*. Beverly Hills, California: Bruce Publishers, 1974.

Super, D. et al. *Measuring Vocational Maturity for Counseling and Evaluation*. Washington, D.C.: American Personnel and Guidance Association, 1974.

Tittle, C.; McCarthy, K.; and Steckler, J. *Women and Educational Testing—A Selective Review of the Research Literature and Testing Practices*. Princeton, New Jersey: Educational Testing Service, 1974.

United Nations Children's Fund. *Woman Power in One Third World*. No. 5410. New York: United Nations Children's Fund, United States Committee for UNICEF, 1975. ED 117 980, Cost: \$1.50.

Vetter, L.; Brown, A.; and Sethney, B. *Women in the Work Force: Follow-Up Study of Curriculum Materials*. Columbus, Ohio: The Center for Vocational Education, 1975.

Vetter, L.; Lowery, Cheryl; and Burkhardt, Carolyn. *Sugar and Spice Is Not the Answer*. Columbus, Ohio: The Center for Vocational Education, The Ohio State University, 1977.

Vetter, L., and Sethney, B. *Planning Ahead for the World of Work: Student Materials*. Columbus, Ohio: The Center for Vocational Education, 1975.

Planning Ahead for the World of Work: Teacher Manual. Columbus, Ohio: The Center for Vocational Education, 1975.

Vetter, L.; Stockburger, D.; and Brose, C. *Career Guidance Materials: Implications for Women's Career Development*. Columbus, Ohio: The Center for Vocational Education, 1974. Cost: \$6.00.

Wolkon, K. *Counseling Girls and Women: A Guide for Jewish and Other Minority Women*. Washington, D.C.: B'nai B'rith Career and Counseling Services, 1973.

YWCA of Los Angeles. *YWCA Vocational Readiness Package*. Los Angeles, California: YWCA of Los Angeles, 1975.

References

Cook, Barbara, and Stone, Beverly. *Counseling Women*. Boston: Houghton Mifflin Company, 1973.

Harrison, Laurie R., and Entine, Alan. "Existing Programs and Emerging Strategies." *The Counseling Psychologist*, 6, 1, 45-49, 1976.

Hilliard, Mary E. Verheyden. *A Handbook for Workshops on Sex Equality in Education*. Washington, D.C.: American Personnel and Guidance Association, 1976.

McEwen, M. "Counseling Women: A Review of the Research." *Journal of College Student Personnel*, 16, 382-388, 1975.

Osipow, Samuel H. ed. *Emerging Woman: Career Analysis and Outlooks*. Columbus, Ohio: Charles E. Merrill Publishing Company, 1975.

Prediger, D. J. et al. *Nationwide Study of Student Career Development: Summary of Results*. Iowa City, Iowa: The American College Testing Program, 1973.

Vetter, Louise. "Career Counseling for Women." *The Counseling Psychologist*, 4, 54-67, 1974.

Part B
Career Guidance Practices
for Special Needs Populations

Who Are Special Needs Populations?

Career guidance is challenged, as is all education and manpower programming, to find equitable roles for groups with special needs. Defining the special needs groups is simple, but to get a universal definition adequate to establish, implement, and evaluate programs for each group is difficult.

Hobbs (1976) has defined "special needs" according to the populations served. The two categories are: (1) persons whose educational skills are underdeveloped to the extent they require some definite modification of usual school programs and procedures, and (2) persons with developmental learning problems who are unable to make adequate progress in the regular grades without supportive help.

The handicapped have been a recognizable group. They are individuals who are mentally retarded, learning disabled, seriously emotionally disturbed, orthopedically handicapped, visually handicapped, hearing impaired, speech impaired, or other health impaired, and multihandicapped.

The following definitions of these handicaps are from the U.S. Bureau of Education for the Handicapped:

Mentally retarded are individuals whose rate of intellectual development is significantly less than the normal rate and their potential for academic achievement is estimated to be markedly less than that of others with a normal rate of intellectual development. Further delineations of this handicap are the educable retarded and the trainable retarded (defined according to increased intellectual limitations by specified intelligence quotients).

Learning disabled are individuals who exhibit a disorder in one or more basic psychological processes involved in understanding or using spoken or written language. These processes may be manifested in listening, thinking, speaking, reading, writing, spelling, or simple computing.

Seriously emotionally disturbed are individuals who suffer from psychiatric disturbances which limit their ability to govern their own behavior.

Orthopedically handicapped are individuals who are limited in self-mobility, sitting in the classroom, and/or using materials or equipment for learning because of muscular, skeletal, or neuromuscular impairment.

Visually handicapped are individuals who are severely limited in their ability to see, and may be either partially sighted or blind.

Hearing impaired are individuals who have a sense of hearing inadequate for success in learning situations. Such impairment may either be hard of hearing (hearing with assistance and aids) or deaf.

Speech impaired are individuals having patterns that differ noticeably from the normal. Speech disorders may be articulatory, vocal, stuttering, or derive from delayed speech and speech disorders associated with a cleft palate, hearing impairment, or cerebral palsy.

Other health impaired are individual who have limited strength, vitality and alertness because of chronic health problems such as heart conditions, tuberculosis, rheumatic fever, nephritis, infectious hepatitis, infectious mononucleosis, asthma, hemophilia, epilepsy, leukemia, diabetes, and other chronic conditions.

Multihandicapped are individuals who have a combination of handicapping conditions, each of which must be considered in planning programs or program modification.

The term "disadvantaged," which is also associated with special groups, emerged in the Manpower Programs following the *Economic Opportunity Act* (1964). Disadvantaged connotes families at or below a poverty level.

The term "gifted/talented" includes those students with superior cognitive abilities, approximately the top 3 percent of the general school population. The term is defined by measured intelligence and/or creative attitudes or other talents that promise to enable those students to make lasting contributions of merit to society. These students are so able that they require special provisions if appropriate educational opportunities are to be provided for them (Marland 1972).

Ethnic minorities or culturally diverse groups are recognized as special needs populations. According to Vetter (1977) these people are defined as non-white, and include American Indians, Alaskan natives, Asians of Pacific Islands, Blacks not of Hispanic origin, and Hispanics. To adjust to the American culture, these groups are exposed to either an assimilation or parallel (a bilingual, for example) program.

Why Have Career Guidance Practices for Special Needs Populations?

Adequate career guidance is important for all young people if they are to become fully contributing members of society. Special needs populations are no less deserving of adequate career guidance. Hoyt (1974) explained the purpose underlying programs for the handicapped group. He indicated that career education seeks to make work possible, meaningful, and satisfying for *all* individuals, and to do so for handicapped persons demands, first of all, the need to regard their rights as the same as non-handicapped individuals. He pointed out that, too often, we tend to be satisfied when we have found *something* that a handicapped person can do. He noted, however, we should be dissatisfied until, *and unless*, we have explored, to the fullest extent, the total array of work that might be possible for a given handicapped person. Stopping prior to reaching this point is being less than fair to the handicapped person and to the larger society.

Career guidance is critical for the special needs population if they are to be prepared for meaningful, productive living. Appropriate career guidance is not being provided to special populations. It was estimated in 1969, that only 150,000 of 500,000 of these young persons who left school and entered the job market had participated in any type of secondary-level career education program (Lake 1974).

The career education movement of the early seventies has begun to remove obstacles preventing opportunities for career guidance and meaningful employment to special needs populations. As more and more special needs populations enter regular career development programs which have been adopted to meet their needs, more understanding of the career potential, educational and training needs has emerged.

Many secondary students who have special needs are being provided educational programs as a result of state legislation. The opportunity to work must also be available. Career guidance practices also are needed to better assure relevance between their education and the life roles they choose.

An Overview of Current Practices

While the special needs of exceptional students have received a great deal of attention, the practices developed and available for these students are quite limited. Those practices which are available focus primarily on students who are mentally retarded. Practices for other special groups, minorities, gifted and talented, and disadvantaged, are sparse. Practices intended for students with multi-handicaps are practically nonexistent. And some practices, even when available, are not used optimally because of limitations in counselor availability and training. Even when staff are available, familiarity, expertise and practical skills in the special needs field are limited.

A general opinion of available practices is that they are limited from the standpoint that they do not simultaneously prepare the work environment for the students and the students for life roles and the world of work, utilize services and informed groups/agencies external to the immediate school administration, or ensure relevancy between the school practice content and the real world.

There appears to be a division among leading special educators as to the efficacy of the special class approach for special needs students (Dunn 1968; Lilly 1970). A disagreement exists among researchers as to whether special classes, are indeed, a suitable place for special needs populations. Because of this uncertainty, many educators are increasingly eager in their plans to dissolve special classes and return the special need students to a less restrictive alternative, sometimes referred to as the "mainstream" of American education, the regular classroom.

Such authorities cite the dependency fostered by special classes which comes from the rejection by regular class peers due to the special needs label and, accounts for the seriously impaired self-concept of many special needs students (Dunn 1968; Romo, Spence, and Prehm 1970). From the literature, conflicting evidence appears. Both configurations, "mainstream" or "special classes" are described as successful.

In cases where there are insufficient vocational programs of a comprehensive nature, the use of work experience may make a positive difference in the education of the special groups. Occupational work experience programs, for example, may be designed to serve academic underachievers and others who have not found an interest in career preparation or basic school work. The purpose of such programs is motivation and change or modification of attitudes to aim at higher levels of achievement in school and in the world of work. This can be accomplished through arranging suitable on-the-job experiences, coupled with special academic and related basic education which will help students develop feelings of immediate accomplishment and success that had previously been unattainable in regular academic curriculum.

What To Consider When Installing Career Guidance Practices for Special Needs Populations

Probably the most critical implementation consideration is to assure that the installation is through a comprehensive approach. Such an approach should include:

1. Establishing efficient methods for identifying appropriate students and their needs for services

2. Appropriately matching student's needs with proposed practices
3. Assessing and utilizing resources and persons available to implement practices
4. Evaluating the efficacy of the practice
5. Planning for future updated, appropriate implementation

Communication of these efforts with staff, parents and community members should be considered a priority. A subsequent factor to consider is the degree to which administrators, community members, and parents support the program through their involvement and program knowledge.

Finally, a major need exists for treating the social development of the special needs students with particular care. Hartlage (1974) found that although specific job skills are necessary for the gainful employment of a retarded worker, their social adjustment, as reflected by their relationships with their co-workers and supervisors, will likely determine how successful they will be in retaining their employment.

An Illustration of a Career Guidance Practice for Special Needs Students

Project PRICE (Programming Retarded in Career Education) was chosen to best illustrate a practice for special needs students, primarily because it demonstrates an administrative model for addressing competency areas for retarded populations.

The U.S. Office of Education's Bureau of Education for the Handicapped contracted the University of Missouri-Columbia to explore the state of the art and develop an in-service model to educate personnel on how to provide more relevant instruction and supportive services for educable, mentally retarded students (hereafter referred to as EMR) within a career education context.

The project set out to accomplish three major goals:

1. To develop an in-service/staff development model to educate regular and special education personnel to provide effective career education services to EMR students in K-12 programs
2. To identify and develop appropriate types of techniques, materials, and experiences so that school personnel can work more effectively with EMR students in a career education context
3. To complete and disseminate the resulting in-service/staff development training program so that it can be utilized throughout the country by school systems desiring to adopt the career education approach

Six midwestern public school systems participated in the project to field test the project's model, techniques, and materials.

The model identifies student competencies within three skill areas and provides techniques and materials for mastering each competency. Delivery strategies are provided with data which was collected to reflect staff development needs associated with such program installation.

Project PRICE was designed to address the cognitive, affective, and psychophysical needs of the educable mentally retarded secondary school student. It is a comprehensive practice presented through a series of working papers which are:

1. Programming Retarded in Career Education
2. Career Education Materials for Educable Retarded Students
3. Career Education: Its Implications for the Educable Retarded
4. Daily Living, Personal-Social, and Occupational Skill Development for Educable Retarded Students
5. Proceedings of Project PRICE Trainees Workshop
6. Career Education Materials for Educable Retarded Students

7. PRICE Needs Assessment Study

8. Selected PRICE Topical Papers

Programming Retarded in Career Education: Working Paper No. 1 presents key concepts of career education, values, and outcomes of a career education program for administrators, teachers, counselors, special education teachers, community workers, parents, and students. Principles providing the foundation for the practice are:

1. Career education should extend from early childhood through the retirement years.
2. Learning should take place in the home, community, and business establishments as well as in the school.
3. All teachers should relate their subjects to career implications.
4. Career education should include basic education, citizenship, family responsibility, and other important education objectives.
5. Career awareness, exploration, guidance, and skill development should be stressed at all levels and ages.
6. Occupational preparation is an important objective of all education.
7. "Hands-on" occupational activities will often facilitate learning academic subjects.
8. All members of the school community have a shared responsibility for career education.
9. The school atmosphere should be democratically, rather than autocratically oriented.
10. Schools should assume responsibility for every individual's life career development, even after the individual leaves the school environment.

Some of the major positive changes that should occur if schools incorporate the above principles into their programs for EMR students are:

1. School administrators and curriculum specialists will become more involved with EMR students, better understand their needs, and consequently be able to design more relevant programming for them.
2. Classroom teachers will become more involved with EMR students, better understand their needs and how to work with them, be more receptive to having EMR students in their classroom, and provide more relevant academic and daily living skills instruction.
3. School counselors will become involved in helping to meet the personal/social and occupational guidance needs of EMR students, both directly and indirectly in collaboration with the special education teacher.
4. Special education teachers will no longer have to meet EMR students' needs and occupational guidance needs almost exclusively; there will be interdisciplinary cooperation among school personnel, and there will be time to focus on the more pressing needs of their students as regular class and community personnel assume more responsibilities.
5. Community workers will become more involved in educational programming, bring realism into the curriculum, and better understand and appreciate the complex problems of educational systems and handicapped youth.
6. Parents of EMR students will become more involved with the appropriate guidance and education of their children, give input and feedback data to school personnel, and assume responsibility with the school in their child's career development.
7. EMR students will be the greatest recipients of the interdisciplinary cooperation between the above groups. Some of the major benefits they will gain are:

- a. Integration into the total school educational program resulting in more "normal" social, academic, and occupational experiences with regular students;
- b. Preparation for meeting the stringent personal, social, and occupational demands of today's society;
- c. Motivation to learn academic materials;
- d. Awareness about themselves and their potentialities; and
- e. Feelings of self-worth, dignity, confidence, happiness, and the ability to make judicious decisions about their future life in becoming valuable and contributing members of society.

Requirements for implementing the program are described. Requirements differ from the traditional programs in that they include sequencing (K-adult), shifting from content to process-based curriculum (that is, skill development becomes a primary educational goal as opposed to merely the acquisition of knowledge and information). Curriculum, for this program, should traverse five components:

1. Home, neighborhood, and community involvement for initial attitudes and concepts
2. School learning elucidated in terms of its career application
3. Career development experiences for occupational exposures, work ethics, values, career exploration
4. Exposure to training, employment, and labor organizations
5. Job skills, whether learned in the classroom and/or on-the-job

The major curriculum areas are daily living skills, occupational guidance and preparation, and personal/social skills. The 22 student competencies comprising the practice are:

1. Managing family finances
2. Caring and repairing home furnishings and equipment
3. Taking care of one's personal needs
4. Raising children and family living
5. Buying, planning, and preparing food
6. Selecting, buying, and making clothing
7. Engaging in civic activities
8. Utilizing recreation and leisure time
9. Getting around the community (mobility)
10. Attaining a sufficient understanding of one's self (self-awareness and appraisal)
11. Obtaining a positive self-confidence, self-concept
12. Desiring and achieving socially responsive behavior
13. Choosing, developing, and maintaining appropriate interpersonal relationships
14. Achieving independent functioning
15. Making good decisions, problem-solving
16. Communicating appropriately with others
17. Knowing about and exploring occupational possibilities (occupational awareness and exploration)
18. Selecting and planning appropriate occupational choice
19. Exhibiting the necessary work habits required in the competitive labor market (work behaviors)

20. Developing the necessary manual skills and physical tolerances (required in the competitive labor market (physical-manual skills))
21. Obtaining a specific and saleable entry-level, occupational skill
22. Seeking, securing, and maintaining jobs appropriate to level of abilities, interests, and needs (job adjustment)

Special personnel are identified as cooperative facilitators for achieving each of the 22 competencies. Options for paralleling additional competencies are presented. Redirection of traditional school and other personnel roles is discussed to accomplish program implementation. The special teacher's role is described to resemble that of an advisor or coordinator of appropriate services. The counselor roles are defined as most valuable in facilitating the curriculum areas, personal/social and occupational guidance and preparation. Roles of community personnel, family members, and post-secondary services are described. The program and curriculum calls for a "radically new orientation" of school personnel with the essential elements being:

1. Cooperative and collective program development
2. Positive and progressive support of staff
3. Modification of traditional activities and innovative instructional ideas

Career Education Materials for Educable Retarded Students: Working Paper No. 2 is a collection of current and effective materials identified and described to meet educable, mentally retarded student needs by competency, grade level, and publisher. Materials are entered for elementary, junior high, and senior high grade levels. The intent of the 150 activities described within the practice is not that of gross motor learning, but effecting the least restrictive alternatives necessary to master the student competencies. An example activity follows:

Competency Level	Activity	Publisher
10 Jr. High	Career Insights and Self-Awareness Games (see elementary level)	Houghton-Mifflin
10 Jr. High	Discovering Yourself helps develop concept of self with self-appraisal charts, quizzes, examples, lists films, books, and group activities to aid class discussion and projects (\$2.40)	Science Research Associates, Inc.
10 Jr. High	Resource Guide in Sex Education for the Mentally Retarded (see listing in elementary)	AAHPER Publications Sales
10 Jr. High	Sex Education for the Developmentally Disabled—A Guide for Parents, Teachers, and Professionals by Fisher, H. L., Krajijek, M. J., and Borthick, W. A. Suggestions for interviews and a picture series of body and emotional functions (\$4.95)	Edmark Associates

The document also lists career education publications for supplements to program implementation in the categories of general, EMR, handicapped, relevant journals, a list of publications, and other information sources.

Career Education: Its Implications for the Mentally Retarded: Working Paper No. 3. provides a position statement. This statement points out the broad nature of career education as opposed to occupational education. All life role settings and events are emphasized as the core of career education for the retarded. The position in summary is that career education for the mentally retarded

1. Is a complete educational concept encompassing all kinds, types, and levels of education
2. Is preparation for all phases of their lives

3. Focuses on interpersonal and intrapersonal skills
4. Is ongoing from preschool through retirement
5. Equips students with saleable skills
6. Provides a balance of content and experiential learning
7. Emphasizes helping them to plan and make decisions wisely
8. Is a way to personalize their education

Daily Living, Personal-Social and Occupational Skill Development for the Educable Retarded Students: Working Paper No. 4 is a handbook of student competencies by skill areas. Within each is a clearly-defined competency statement which allows for ease of determining mastery. They appear as follows in these examples:

Competency No. 13:-Maintaining Good Interpersonal Skills

The student will be able to:

13.1 Know how to listen and respond. He should be able to listen attentively to others and to interpret what is said to him. He should know and use common listening and speaking courtesies. He should be able to introduce people to each other and to introduce speakers to the class. He should be able to recite and to recognize good interpersonal skills, to imitate others, and to follow a leader. He should know appropriate responses to friendly and unfriendly approaches from other students.

The Proceedings of Project Price Trainees Workshops: Working Paper No. 5 includes the following topical areas. Each topic section presents examples and resources for accomplishing the tasks set forth in the plan for in-servicing participants. They are:

CAREER EDUCATION

Career Education: A Definition

Career Education for the Mentally Retarded in the Secondary Schools

Values, Values Clarification and Values Education

CAREER EDUCATION INSTRUCTION

Daily Living Skills

Personal-Social Skills

Occupational Skills

TEACHING RECREATION AND LEISURE COMPETENCIES

Physical Education Programs

Therapeutic Recreation Services

Leisure-Time Skills

Career Education Materials for the Educable Retarded:
Working Paper No. 6 is an update of the No. 2 resource document.
It introduces 150 updated and supplemented resources by competency, grade level, activity, and publisher.

The Price Needs Assessment Study: Working Paper No. 7 is an extensive research document establishing the needs of school personnel for implementing career education with the mentally retarded student population. Data is extensive with general implication of the study as follows:

1. School personnel appear to be willing to utilize competency-based career education for educable retarded students. A competency-based programmatic curriculum guide would not only be useful but essential for successful integration.
2. Most regular teachers are generally receptive to the integration of retarded students for the development of certain competencies. Therefore, successful mainstreaming is possible if appropriately planned.

3. There is a pressing need for in-service training of all types of school personnel if retarded students are to be accommodated appropriately by regular teachers and programs.
4. Special education teachers have a changing role as career educator, resource specialist, materials provider and developer, remedial specialist, and as a coordinator and monitor of services to special students.
5. Counselors need to get more involved than they presently perceive their responsibility toward these students, particularly in the personal/social and occupational curriculum areas.
6. Home economics teachers are appropriate and generally willing to assist retarded students if they get in-service training, materials, and considerable assistance from the special education teachers.
7. There are several competencies which need more fixed responsibility so that retarded students receive instruction in all career education areas.
8. There is a need for more emphasis on occupational guidance and preparation.
9. University special education teacher training programs need to place a much greater emphasis on career education, integration of students, and the changing roles of special teachers. Other teacher and counselor education training programs must give much more attention to instructing their students about the characteristics and potentials of retarded students.

The competencies which were presented were usually agreed upon as major ones for program address. Also, program efforts can be improved and redirected if appropriate in-service training and communication occurs among various school personnel.

PRICE may be purchased by working paper documents or by finalized project products. The eight individual project working papers may be obtained in microfiche or hard copy through the ERIC Document Reproduction Service, P.O. Box 190, Arlington,

Virginia 22210. Each document contains pertinent ordering information. A synthesis of the papers is also available. It is in the form of a finalized package which is comprised of two project products.

1. *Life Centered Career Education: A Competency-Based Approach (Program Guide)*
2. *Trainers Guide to Life Centered Career Education*

The products may be ordered through the Council for Exceptional Children, 1920 Associates Drive, Reston, Virginia 22091.

Project PRICE Working Papers

Brolin, Donn E. *Programming Retarded in Career Education: Project PRICE Working Paper No. 1.* Columbia: University of Missouri, 1974. ED 096 777, MF \$0.75, HC \$1.85 plus postage.

Brown, Greg et al. *Career Education Materials for Educable Retarded Students: Project PRICE Working Paper No. 2.* Columbia: University of Missouri, 1974. ED 104 067, MF \$0.76, HC \$3.32 plus postage.

Gysbers, Norman C., and West, Linda L. *Career Education: It's Implications for the Educable Retarded: Project PRICE Working Paper No. 3.* Columbia: University of Missouri, 1975. ED 109 838, MF \$0.76, HC \$1.95 plus postage.

McIntoch, Sara et al. *Daily Living, Personal-Social and Occupational Skills Development for Educable Retarded Students: Project PRICE Working Paper No. 4.* Columbia: University of Missouri, 1975. ED 109 838, MF \$0.76, HC \$1.95 plus postage.

Brolin, Donn E. *Proceedings of Project PRICE Trainer's Workshop: Working Paper No. 5.* Columbia: University of Missouri, 1975. ED 112 548, MF \$0.76, HC \$4.43 plus postage.

Malever, Michael, and Matyas, George, Jr. *Career Education Materials for Educable Retarded Students: Project PRICE Working Paper No. 6.* Columbia: University of Missouri, 1975. ED 116 443, MF \$0.76, HC \$1.95 plus postage.

Brolin, Donn E. et al. *Price Needs Assessment Study: Project PRICE Working Paper No. 7*. Columbia: University of Missouri, 1976.
ED 134 158, MC \$0.83, HC \$4.67 plus postage.

McKay, Donald J. *Selected Price Topical Papers: Project PRICE Working Paper No. 8*. Columbia: University of Missouri, 1977.

Abstracts of Selected Practices

Cheek, Donald K. *Assertive Black . . . Puzzled White*. San Luis Obispo, California: Impact Publishers, Inc., 1977.

This book presents a positive program for developing black self-assertion and personal effectiveness. Dr. Cheek uses assertive training as his vehicle for developing skills in effective self-expression "ready made for blacks." His book interweaves the psycho-historical implications of the black experience in America with an assertiveness training program designed specifically for blacks. Particularly important is his presentation of the way in which black assertiveness is misinterpreted by whites. Dr. Cheek gives extensive examples for black application of assertiveness training. He offers practical tools and a step-by-step foundation for those who counsel blacks.

Cost: \$4.95

Fullerton Union High School District. *Project WORKER*. Fullerton, California: Fullerton Union High School District, 1974.

Project WORKER of Fullerton, California attempts to bring together the teenage, handicapped job-seeker and the world of work by providing educationally handicapped, high school students with job entry skills. Students learn how to locate jobs in the community, job interview techniques, selected job skills, and perform on and off-campus job training. The project's primary goal is not merely job placement for handicapped students, but placement in better jobs with higher skill levels and pay than are traditionally available for these students. The project makes extensive use of video tapes for on-campus pre-employment instruction, orientation training in specified job skills acquisition, employment facilitation, and performance evaluation.

Project WORKER is incorporated into 23 special education classes in eight high schools throughout the district. Guides to achieving the goals of this career guidance practice are:

Project WORKERS Manual for Career Placement Aides.
Fullerton Union High School District, California Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.: California State Department of Education.

The manual was produced by this secondary school district for the use of career placement aides in a special education work experience program. Each aide's professional responsibilities include facilitating students' efforts to participate in the program; acting as the center for information and processing of special education students on his campus; and serving as the communication link between teacher, student, counselor, and work experience coordinator. Step by-step procedures are given for enrollment in the program, obtaining interview referrals, issuing work permits, granting credit, grading, registration with the Department of Vocational Rehabilitation, hiring by the school district, and job termination. Sample forms are provided with the instructions, as well as copies of pertinent bulletins, policy information, a student checklist and suggested professional resources.

Cost: EDRS price, MF—\$0.75, HC—\$3.15 plus postage. ED 091 561

Project WORKER: Teacher's Manual for a Course in Career Decision Making for Special Education. Fullerton Union High School District, California. Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.: California State Department of Education, Sacramento.

Students or teachers using the manual proceed at individual rates through a systematic and progressive set of occupational experiences to formulate and know their self-concepts, potentials, and abilities.

Emphasis is on independent research and study, utility sample lesson plans to help teachers coordinate a variety of experiences. The manual includes specific examples and sources for materials (many of them locally oriented), that have been successfully used to teach secondary special education students career decision-making and the necessary entry level skills for employment. A course outline in the form of a student checklist provides a guide to preparing the student for gainful employment.

Materials in the manual include sample aptitude and interest testing instruments, a listing of jobs in 15 career clusters, suggestions for field trips and guest speakers, a bibliography of commercially prepared instructional materials, suggestions for a basic collection of career literature, information on setting up cooperative education, providing exploratory work experiences, via work-stations (including local laws governing such programs), an instructional unit in interviewing, a sample data sheet to help students fill out applications, and a catalog of 82 locally-produced videotapes.

Cost: EDRS Price, MF—\$0.75, HC—\$9.00 plus postage. ED 091 560

Gardner, David C., and Warren, Sue Allen. *Career Education Potential for Students at the Massachusetts Hospital School in Canton*. Canton, Massachusetts: Massachusetts Hospital School, 1975.

Focusing on the career education potential of physically handicapped individuals at Massachusetts Hospital School (MHS), the project included a current population assessment, a survey of employment prospects, and career education resources for physically handicapped students. Based on a series of data collection procedures, 18 career education recommendations are offered for MHS. A questionnaire (23 percent return) to 434 state firms to determine the kinds of businesses and jobs employing the physically handicapped indicated many employers appeared unaware of the potential of physically handicapped employees. Findings of a national survey of 51

directors of State Easter Seal societies (24 percent return) and 50 State Commissioners of Education (42 percent return) to determine successful occupations of physically handicapped persons (coded by handicapping condition and listed under occupational clusters), showed that a variety of careers are open to physically handicapped persons in the United States. The program/population study covered: physical facility, equipment, records, handicapping conditions, academic aptitude/curriculum, personality traits (High School Personality Questionnaire), and school programs. Findings of a questionnaire to graduates of 1968-1973 classes (53 percent return) also are included. Resources include potential funding sources, annotated bibliography of classroom materials, list of publishers, and professional references.

Cost: EDRS Price, MF—\$0.83, HC—\$10.03 plus postage.
ED 117 454

Goldman, Leo, and Flugman, Bert. *Occupational Counseling for Physically Handicapped Students: A Demonstration and Training Project*. New York: New York Education Department, Office of Occupational and Continuing Education, 1976. ED 132 811.

This document describes a project which provides occupational counseling to 60 physically handicapped high school students. Included in the practice report is the training for counselors, developments of a counseling model, the application process in schools and descriptive and comparative analysis of student data.

Cost: \$4.67 plus postage

Los Angeles City Schools. *Aides to Career Education: Instructional Aides Handbook*. Los Angeles, California: Los Angeles City Schools, Division of Career and Continuing Education, 1976.

This handbook is designed for use by administrators, teachers, and instructional aides in the Aides to Career Education (ACE) Program. The program provides assistance to academically, socially, economically, and culturally disadvantaged students in secondary vocational programs by employing instructional aides who are subject field specialists to assist in improving students' educational performance and employment potential.

The handbook contains information on: program implementation, purpose of the handbook, program goals and purpose, description and characteristics of disadvantaged students, the roles of the teacher and instructional aide, delineation of the teacher/aide role (includes a differentiation through task analysis), program accountability, and aide attendance information. Appended material (124 pages) includes: a guide for using audiovisual aides, California legislation affecting instructional aides, referral agencies list (Los Angeles area), rules and regulations for school personnel, an explanation of selecting a career and getting a job, description of the Pasadena City College two-year teacher aide program, job descriptions for monolingual English aides in 15 subject fields, job descriptions for Spanish language aides (written in English) in 13 subject fields, sample instructional-aide exams, self-evaluation questions, and a 27-item annotated bibliography. (Author/MS)

Cost: EDRS Price—MF \$0.83, HC—\$8.69. ED 120 524

Massachusetts State Department of Education. *Project CAREER/Handicapped*. Boston, Massachusetts: Massachusetts State Department of Education, 1974.

This practice, in the form of a report covers the three phases of project CAREER/Handicapped. The purpose of the project was to design a system of coding behavioral objectives which would document the skills that could be attained by special needs students. Project objectives and procedures are discussed. The major results and accomplishments of the project include the following: (1) coding of 19,325 behavioral objectives, (2) utilizing three special needs consultants for every special needs area, (3) developing a battery of instruments which were utilized to evaluate the gains of the students, (4) establishing several publications which documented project activities, (5) conducting a major conference on the application of the data bank for special needs students, (6) presenting the purpose and programmatic functions of the project to major educational conferences, (7) conducting several in-service training sessions with the special needs consultant, (8) establishing in-service training systems and a pre-service graduate level course, (9) completing a document which describes the rationale for coding, and (10) analyzing

tentatively the social needs coding with reference to the project data bank. An analysis of the pre and post-data, pertaining to the special needs students of three pilot programs, is appended.

Cost: EDRS Price, MF—\$0.83, HC—\$2.06. ED 121 932

Miller, Juliet, and Leonard, George. *Career Guidance Practices for Disadvantaged Youth*. Washington, D.C.: The American Personnel and Guidance Association, 1974.

This monograph sponsored by the National Vocational Guidance Association points out the vital topics of the disadvantaged student's needs and behavioral objectives as they relate to accomplishing the goal of self-development and understanding the world of work. This document describes 22 activities which can help to enhance the skills in career development and guidance. Relevant materials are listed for practice selection and implementation.

Cost: APGA members \$2.95, non-members \$4.00

South Dakota School for the Deaf. *Career Awareness for Deaf Education: Resource Curriculum Guide*, 1975. ED 110 750.

This practice guide relates comprehensive teacher-produced materials to occupational information about 12 job clusters that would be most practical for the deaf or hearing impaired. It also includes a special guide to teachers job-seeking skills and a listing of established postsecondary facilities offering programs for deaf students.

Cost: \$14.05 plus postage

Swearengen, Mary, and Mosley, B. *The CI-TAB Secondary Program: Career Information and Training Activities for the Blind*. El Paso, Texas: Education Service Center Region 19, 1975.

This practice presents a secondary career education approach for visually handicapped and blind students available in braille and cassette recordings. Five general discussions focus on (1) procedures and consumers, goods and services, (2) employment and placement services, unions and social securing,

(3) resumes, applications, and interviews, (4) job classifications, and (5) independence, responsibility, and freedom.

Cost: EDRS Price, \$10.03. ED 129 032

Warwick, Edna, and Dixon, William. *Mobile Unit for Vocational Education Evaluation*. Lawson, Maryland: Board of Education of Baltimore County, 1973.

The Mobile Unit for Vocational Education Evaluation, Lawson, Maryland, assesses the employment potential of over 150 mildly, retarded students enrolled in special education classes throughout Baltimore County, Maryland. This project is intended to provide more specific directions for education in individualizing pupil instruction in the classroom, facilitate pupil placement in school and community work-training programs, and reduce the dropout rate of 16 year-old students who may leave school for economic and other reasons. By focusing on abilities not apparent in the classroom setting, the Mobile Unit for Vocational Education attempts to provide the teacher with realistic approaches of the work potential of students while encouraging exploration of job possibilities or training which can lead to satisfactory work placement. The unit assesses a student's abilities, aptitudes, and limitations by exposing the student to a simulated work environment contained in the van. The evaluation is shared with parents, teachers, and counselors to better understand the student's potential in the work-world. For further information contact, Ms. Edna T. Warwick, or Mr. William T. Dixon, Board of Education of Baltimore County, 6901 North Charles Street, Lawson, Maryland 21204. (301) 494-4221. For a limited time, materials are available at no cost through the Mobile Van Unit for Vocational Education. Materials will be available through ERIC after the supply is exhausted.

A List of Additional Practices

Bekker, G. *Model for Evaluating Programs in Vocational Education for the Handicapped*. Houston, Texas: Texas Education Agency, 1975.

Dogin, Y. *Help Yourself to a Job. Part I*. Minneapolis, Minnesota: Finney Company, 1974.

- Fearon Publishers. *The Job Box*. Belmont, California: Fearon Publishers. List price, \$60.00, school price, \$45.00, n.d.
- Frobel, Charles. *Project SERVE: Teacher/Experience Narrative for Senior High Schools of Handicapped-Disadvantaged-Special Needs*. White Bear Lake, Minnesota: Special Intermediate School District 916, 1974. Cost: \$2.50.
- Hart, R.; Pryor, R.; and Bond, L. *Development of a Model Community Evaluation Center for the Disadvantaged and Handicapped*. Halifax, North Carolina: Halifax County Technical Institute, 1973.
- Hoyt, Kenneth. *Career Education for Special Populations, Monographs on Career Education*, 1976. MF \$0.83, HC \$2.06, plus postage.
- Kehoe, JoAnn W. "A Role Play of Indian-White Value Differences." *History and Social Science Teacher*, 11, 1, 45-51, 1975.
- Kindred, Elizabeth M. "Integration at the Secondary School Level." *Volta Review*, 70, 1, 35-43, 1976.
- Levoci, James P. "Career Education for Special Education." *Career Education Monograph Series*, 1; 4, 1974.
- LoCasio, Ralph, and Nesselroth, Jeanne. "The Career Development Inventor: Use and Findings with Inner City Dropouts." *Journal of Vocational Behavior*, 8, 3, 285-293, 1976.
- Los Angeles City Schools. *Aides to Career Education (for disadvantaged youth): Instructional Aide Handbook*. Los Angeles City Schools, 1976. HC \$8.69, ED 120 524.
- Miller, J., and Leonard, G. *Career Guidance Practices for Disadvantaged Youth*. Washington, D.C.: American Personnel and Guidance Association, 1975. Cost: \$2.95.
- Neely, Marge, and Kosier, Mary W. "Physically Impaired Students and the Vocational Exploration Group." *The Vocational Guidance Quarterly*, 26, 1, 37-44, 1977.

Olympus Publishing Company. *"Career Education for Gifted and Talented Students."* Baltimore, Maryland: Olympus Publishing Company. Hardcover, \$7.95, Softcover, \$5.95, n.d.

Pinellie, T. "Utilizing Community Resources in Programming for the Gifted." *Gifted Child Quarterly*, 17, 3, 199-202, 1973.

Pryor, C. *Project People of Peoria: Career Awareness and Exploration*. Peoria, Illinois: Peoria Public School District 150, 1974.

Quincey Public Schools. *Career Education Through Multi-Experience Centers*. Quincey, Illinois: Quincey Public Schools, 1974.

Spencer, Barbara G. et al. "Using the 'Kuder E' with Choctaw Students." *American Indian Education*, 15, 3, 30-34, 1976.

Sherton, Jeffrey. "Vocational Appraisal of the EMR Adolescent: An Exploratory Study of a Public School Class." *Journal of International Association of Pupil Personnel Workers*, 11, 4, 156-158 and 205-206, 1975.

Warner, Lynn. "Second Generation Ethnic Counseling: Problems and Suggestions." *School Guidance Worker*, 30, 6, 19-21, 1975.

Woal, S. "Career Education Program for Visually Handicapped Students." *Vocational Guidance Quarterly*, 23, 2, 172-173, 1974.

References

Dunn, L. M. "Special Education for the Mildly Handicapped—Is Much of It Justified?" *Exceptional Children*, 35, 5-22, 1968.

Hartlage, L. *Use of Peer Group Influences in Work Preparation Programs*. Toronto, Canada: Paper delivered at the 97th Annual Meeting of the American Association of Mental Deficiency, June 4, 1974.

Hobbs, A. *Vocational Education for Special Groups*. Washington, D.C.: American Vocational Association, 1976.

Hoyt, K. B. *Career Education and the Handicapped*. Unpublished manuscript, 1974.

Lake, T. ed. *Career Education: Exemplary Programs for the Handicapped*. Roster, Virginia: Council for Exceptional Children, 1977.

Lilly, S. *Teapot in a Tempest*. *Exceptional Children*, 43-49, 1970.

Marland, S. *Education of the Gifted and Talented*. Washington, D.C.: U.S. Office of Education, 1972.

Romo, B.; Spence, B.; and Prehm, H. *An Investigation of the Adjustment of a Selected Population of Special Needs Population in Oregon*. Eugene, Oregon: Rehabilitation Research and Training Center, University of Oregon, Working Paper No. 22, 1970.

Vetter, L., and Ransom, R. M. *An Analysis of Documents from State Departments of Education Relating to Comprehensive Career Guidance Programs and of Part C FY 1974 and FY 1975 Project Documents Relating to Guidance*. The Center for Vocational Education, The Ohio State University, 1977.

Chapter 7

Computer-Based Career Guidance Practices

What Are Computer-Based Career Guidance Practices?

Computer-based guidance can be defined as the use of a computer, either off-line or on-line, as a tool to deliver some part(s) of a systematic career guidance program. Off-line use means the user is not in direct communication with the computer; rather, the user completes a form or questionnaire which is processed by a computer, and the results or report are sent to the user. On-line means the user is in direct communication with the computer, via cable or phone line, and is in control of the interactions which take place with the computer.

In off-line use, the components of the computer-based system are: (1) a questionnaire on which the user states preferences or characteristics, (2) a computer, (3) appropriate data files, and (4) a computer program which identifies elements in the data file which meet the user's preferences and prints these out.

In on-line use, the components of the system are: (1) terminal devices (either typewriter or TV-screen type); (2) cables or phone lines connecting terminal devices to a central computer; (3) interactive dialogue which has been prepared and stored in the computer's files; (4) data files; (5) a computer; (6) control devices; and (7) computer programs which coordinate user input, preconstructed dialogue, and data files.

The purpose of this chapter is to describe, in detail, computer-based guidance systems which are directly used with students. The computer is also being used in a variety of ways which relate indirectly to the delivery of guidance. The purpose of this chapter is not to cover these applications in detail. However, they will be reviewed here briefly.

Indirect Applications

The first of these applications is administrative and counselor-support functions. These applications include scheduling and schedule changing of student course selections; storage, printout, and/or on-line retrieval of student records; and monitoring of student attendance. Public school counselors have been heavily burdened with these functions. Giving these functions to the computer should have the positive effect of providing increased time for valid counselor functions.

Almost without exception the development of these administrative functions has been performed and funded by local school districts, although sophisticated scheduling packages may be leased from commercial vendors. In only one case have these administrative counselor-support functions been included as part of a career guidance package. That case was the Computerized Vocational Information System (CVIS), whose guidance functions will be described in detail later in this chapter. CVIS includes a set of counselor time-saving capabilities, namely, on-line building of schedules for transfer students, on-line changing of student schedules, on-line access to the school's master schedule in order to determine course availability, display of student records, and a sophisticated attendance system. In the case of CVIS, these functions were added to the career guidance system to make the package cost-feasible and to try to assure the continuing existence of the guidance system for students.

A second, peripheral application of the computer to guidance is test scoring. At the simplest level, computers process optically-scanned answer sheets and report individual scores and group means. At the most complex level, they score instruments such as the Strong Vocational Interest Blank, the Differential Aptitude Tests, or the Minnesota Multiphasic Personality Inventory, and provide very detailed computer-printed interpretation. In this function computers provide an indispensable support function for guidance.

A third, peripheral function of the computer is counselor training. With the new terminal technology of the last decade which allows the development of structured interactive dialogue, it is entirely feasible to construct simulated counselees for counselors in training. Similar to programs which have been extensively used in the training of medical doctors, these programs may present a

client response and expect the counselor in training to enter or select from a multiple choice list the best counselor response, or at least the one which best fits a particular theoretical orientation.

Similarly, dialogue could be developed which describes counseling cases and asks the counselor in training to prescribe the best method of treatment. Hummel (1973) has experimented extensively with this use of the computer in guidance. In the future, such programs may be extremely helpful as training tools for use after the study of theory and before actual face-to-face contact with clients.

A final peripheral use of the computer in relationship to guidance is the assessment of manpower needs and the storage and manipulation of job banks. The first task is typically performed by vocational education management information systems at the state level to analyze the current supply of workers in a given field and project future needs. The use of the computer to store and manipulate job banks is a different use, typically related to the U.S. Department of Labor's Office of Employment Security. In this application, all job openings which have been reported by employers in a given state or region are placed in standard format in computer storage. In turn, local, state employment agencies have access to these data via terminals connected to a central computer, via printout, or via computer-produced microfiche. The data are then used to assist clients in finding job placement.

The remainder of this chapter will be devoted to specifically those systems which are designed to provide assistance to student or client rather than to counselor.

Why Have Computer-Based Guidance Practices in Schools?

The computer has been used in career guidance for a little over a decade. In the early stages of development, there was considerable concern by practicing counselors that the computer was infringing upon counselor roles and that students would be dehumanized. Most of the fear of infringement has dissipated, and research has shown that students do not feel dehumanized. A decade of computer-based systems use has strengthened the following rationale for their use in schools:

1. Computers are capable of performing some guidance tasks better than humans. Among these tasks are:
 - a. The storage and fast retrieval of vast quantities of data
 - b. The immediate updating, either on-line or through punched cards, of data files
 - c. The fast search through large data files to identify options which have exactly the combination of characteristics sought by the user and the ability to redo this search again and again with varying combinations
 - d. The ability to merge elements of one data file with elements of another, i.e., to retrieve a student's rank in class and SAT score from that student's record and to search a file of colleges which will accept students with that combination of rank and test scores
2. With the current counselor-student ratios, adequate career guidance services cannot be provided and are not being provided (Prediger et al. 1973; Harris-Bowlsbey 1975). The society's values are not currently tuned to improving these ratios, and the future is not promising in this regard. The implication of this situation is that more cost-effective ways must be found to deliver career guidance.

Counselor assistance is currently costing an average of \$13 per hour at the secondary level, and computer delivery is costing between \$2 and \$5 per hour, depending upon which system is used. It is, therefore, mandatory that the profession identify those guidance functions which must be done by counselors on a one-to-one basis and those which can be effectively performed by computer, curriculum, group guidance, or other means. The key to cost-effective guidance would be to design a guidance program which optimally merges these various delivery systems in a systematic way.

3. There is high student appeal to computer delivery of guidance information and considerable evidence of effectiveness. Details of these findings are included in the section on Evaluation.
4. Computer technology offers some valuable assets for guidance purposes:
 - a. On-line systems are capable of providing a high degree of student-system interaction and dialogue, thus simulating good counselor interviews.
 - b. Computer systems can be configured to serve many simultaneously, in a variety of locations, for many hours. Thus, terminals can be placed not only in schools, but also in shopping malls, employment agencies, prisons, libraries, etc., and can be available 24 hours a day.

An Overview of Current Practices

The first computer-based guidance systems were being conceptualized by at least seven development teams in the mid-1960s and the first systems became operational in field trial mode in 1968 (Gallagher 1969). One might view the approximately 30 systems which have been developed to date in three categories. These categories represent an increasing degree of sophistication and complexity.

The first can be called *batch-processing systems*, or *indirect inquiry systems* as they were labeled in the National Vocational Guidance Association Commission's report (Harris 1971). In these systems, as indicated at the beginning of this chapter, the user is not in direct communication with the computer. Rather, the user completes a questionnaire naming the characteristics desired in an occupation, college, or financial aid. This questionnaire is then sent to a central place for processing. As the computer reads the characteristics desired by the user, it searches a data file of possible options and selects those which have the combination of characteristics desired, and prints these out. The characteristics of this type of system are as follows:

1. The user is not in direct control of the computer and therefore, lacks what Tiedeman (Dudley and Tiedeman 1977) calls "sense of agency."
2. The user is unaware of the narrowing effect which each of the user's chosen characteristics has exercised on the search. For example, the student does not know that selecting the characteristic *trimester plan* would significantly reduce the number of colleges which qualify in all other respects, and the student may, by using this variable, fail to consider a group of colleges.
3. The length of time between a student request and computer response is relatively long. With the commercial operations which are very common in the beginning of computer-based guidance, the turn-around time was usually two to four weeks. In a batch-processed version of Computerized Vocational Information System (CVIS) currently operational in the Joliet, Illinois schools, this time has been reduced to overnight.
4. The systems have made use of a limited number of computer's guidance capabilities, i.e., the storage and retrieval of data and the ability to search through data files for items with given characteristics.

The batch-processing systems were popular in the early years of computer-based guidance. In fact, there were approximately 15 operations of this type. They did not have sufficient use to allow them to survive financially, and they have slowly faded away. Apparently, the only remaining indirect-inquiry system is the version of the CVIS mentioned above.

The second category of computer-based guidance systems is the on-line or direct inquiry system. In this type of system the user is in direct communication with a computer and using a terminal device which is connected by cable or phone line. These systems might be differentiated on the basis of at least three dimensions: (1) the sophistication of the terminal device used, (2) the sophistication of the guidance treatment, and (3) the existence and quality of monitoring.

Terminal devices may be of at least three types. The simplest, least expensive and easiest to install is the typewriter-like terminal. This device allows the user to type a message, and the computer responds by typing back. Systems which use such terminals can usually be initiated by putting the earphone of a telephone into an acoustical coupler and then dialing the number of the host computer center. This ease of connecting makes these systems much more portable than systems which use more sophisticated terminals. The other side of the coin is that the typewriter-type terminal has less appeal for many users than the more sophisticated types.

The second type of terminal used is the cathode ray tube terminal. This terminal looks like a television screen and has a keyboard. Cathode ray tubes come with or without a device called a light pen. This instrument can be used to touch fields on the screen which have been sensitized so that the touch causes the computer to respond in some preplanned way. With cathode ray tubes, users may enter data by typing on the keyboard or touching items with a light pen. The computer responds by writing messages on the screen. Cathode ray tubes may be used in connection with other items of equipment: a printer, which makes a paper copy at the user's request for material which has appeared on the screen, a microfiche viewer for standard displays which do not need to vary for given users, and computer-controlled audio and visual devices which project slides or play tapes which complement the written messages.

A third type of terminal is a gas, plasma panel. The prototype is the one engineered by Donald Bitzer at the University of Illinois for the *PLATO* system. This terminal allows color, motion, graphics as well as words, user response by the touch of the finger and coordinated slides and audio discs.

The second dimension of direct-inquiry system is the sophistication of guidance treatment. This treatment ranges from simple information retrieval to an attempt at long-term systematic assistance to career development. Some systems have extremely little text or interactive dialogue and specialize in two functions only:

1. The retrieval and display of information, such as job descriptions, descriptions of colleges, military programs, financial aids, and the like; and

2. The search of large data files based on the successive selection of desired characteristics.

Other systems combine these data retrieval and search strategy functions, which are the *sine qua non* of computer-based guidance, with interactive dialogue. This dialogue may be for the purposes of instruction (teaching how to select a college), eliciting student response (taking of a questionnaire or test instrument), or guidance (pointing out a discrepancy between the student's record and the admission requirements of a hoped-for institution). Some systems attempt even more global objectives, such as teaching decision-making, assistance with value clarification, administration and interpretation of instruments, and simulation of career decision-making.

The third dimension of direct-inquiry systems to be considered is the degree and sophistication of monitoring. Monitoring is a capability which is built into the program by the developers to make the system more individualized and to assist in the personalization of the information and treatment received. Monitoring can mean any one or any combination of the following:

1. The building of a record for each user which stores information about that use. This allows the system to welcome the user back to the exact place where the user left off, or to recall past decisions, scores from instruments taken on-line, or lists of options being considered.
2. The storing of a record about the user before the user comes to the system. This allows such things as the recall of relevant grades when a given occupation is being considered or the recall of rank-in-class and college entrance test scores when a college search is being done.
3. The prescription of use of particular parts of the system based upon a present level of vocational maturity or crystallization of career plans as measured by instruments taken at the terminal.

The characteristics of direct-inquiry systems are:

1. The user is in direct communication over the computer and has a high degree of control over use of the system.

2. The user can be continually aware of the effects of choices since the system constantly informs about the effect which these choices have and offers the possibility to remake decisions or reorder priorities.
3. The user has immediate feedback, within milliseconds or seconds.
4. The full guidance capabilities of the computer, including data storage and retrieval, file-searching, simulation of interviewing and individualization of treatment are being used.
5. A high degree of personalization is achieved through the storing and use of user data, and the monitoring process.

The third category of computer-based guidance is one conceptualized and partly operationalized by Tiedeman (1966) in his Information System for Vocational Decision (ISVD). Though developed by him between 1966 and 1969, it is still futuristic. The NVGA Commission (Harris 1971) called this system *direct inquiry with personal and system monitoring*. The characteristics envisioned by Tiedeman in ISVD and by Bowsbey in her futuristic thinking are as follows:

1. The system's terminal will be capable of color, sound, graphics, and the projection of film loops and slides.
2. The user can talk or type in natural language rather than having to touch items or type in multiple choice letter or number designations.
3. The computer can serve as a prosthetic device (Ellis and Tiedeman 1968) to monitor the user's decision-making processes and to provide extensive support until the individual has sufficiently learned and internalized these processes so that the crutch is no longer necessary.
4. National data files will be available which are being constantly maintained from one central source, for the benefit of all types of information systems.

Computer-based guidance systems have not been as widely or rapidly accepted as their early developers hoped and prophesied.

None of the approximately 15 batch-processing systems developed in the early years are now operational. They did not have sufficient user appeal to make them survive at their commercial price. Several of the early direct-inquiry systems were at least initially dependent upon outside funding from the state, federal government or private foundations. This meant that special teams were assembled for a very specialized development function which was not integrally tied into the school's ongoing function regarding program, funding or personnel. The result was that most of these systems flourished during the period of outside funding and then disappeared when funding was withdrawn. Local schools would not or could not absorb them or pay for their continuing development.

The second reason for extinction of some systems was their complexity and cost. Some systems made use of specially-designed terminals and support equipment which proved to be either too technically complex for normal operation or far too expensive.

Those systems which have survived had some combination of the following characteristics:

1. They performed fairly simple data retrieval and searching tasks.
2. They combined some administrative functions (scheduling, student record keeping, attendance-keeping) with the guidance functions.
3. They made use of standard terminals which could also be used for business purposes.
4. They did not exceed the \$2 to \$4 per hour cost range.

Computer-based systems are currently being used in approximately 500 sites in the nation. There is a very real potential now for great expansion of this number due to the substantial funding by the Department of Labor provided for nine states (Oregon as a model state and eight others). Under this funding, a state consortium must provide vocational information services by computer and non-computerized delivery systems to schools and agencies statewide. Very little new system development has taken place in these eight states. Instead, they have adapted or adopted one of the existing systems. Extensive work has been done, however, to improve data files and to localize them.

In summary, schools have taken a very long time to accept and afford computer-based guidance. While futuristic, third-generation systems are being developed, the field is just now beginning to accept the second generation, that is, straightforward direct-inquiry systems.

A second trend in the present state of the art is that computer-based systems have not been well integrated into ongoing career guidance programs. Counselors have either viewed them as possible threats or as sufficient in and of themselves to do the local career guidance job. Therefore, they have been installed as add-ons in guidance departments without the full commitment of counselors. Almost no systems analysis of the kind which sets objectives for the career guidance program, then looks for the most cost-effective delivery systems and harmonizes these together into one program, has taken place. The result is that all of the present developers and providers of computer-based systems recognize a tremendous need for in-service training of counselors in this regard and for requests for such systems to come from the "grass roots" level.

A third trend has been that almost all systems have been developed for students at the secondary level. One system, the System for Interactive Guidance Information (SIGI) was specifically developed for the community college population. Another system, DISCOVER, has now been modified for use at the college level. At least three systems, DISCOVER, CVIS, and CACE (Computer-Assisted Career Exploration), were also tested out at the junior high school level.

A fourth trend has been that data file acquisition and maintenance is a very complex problem. Since there is no central data collection and maintenance agency, each system develops its own files. For colleges, data are collected by direct mailings to these institutions. For occupational data files, all systems rely heavily upon the information available from the Department of Labor. Data files vary widely in their quality and quantity. Developers struggle with the difficulty of getting sufficient, accurate, and recent data while having a medium capable of instant updating. Although some computer-based systems are capable of incorporating local data, few sites have collected it and made it available to students because of the tremendous cost of doing so.

A fifth trend has been an ongoing struggle with technology. On-line systems are complicated to install and maintain in smooth

operation. Counselors have little patience with or understanding of technology. Guidance often had difficulty communicating effectively with data processing. Guidance is often in low priority for machine time, system priority, and technical maintenance or new development. Data processors often fail to recognize the extreme importance of reliable operation and good system response time in order to maintain student motivation.

To complicate all of this, no computer-based guidance system is truly transportable. Each system has been developed for a particular manufacturer's machine, for a particular terminal, and for a specific combination of computer language and software support. This means that a given computer-based system cannot be used in a school or agency which does not have this exact configuration of hardware and software, without extensive and expensive conversion effort. Further, for the sake of cost feasibility, terminals which are designed for business functions have had to be used. These often lack capabilities which would be very desirable for education.

A sixth trend is the lack of sufficient evaluation, especially of the longitudinal variety. Each of the systems has worked hard at short-term evaluation. Research methods of observation, interview, and questionnaire have been used extensively. The hard data have been difficult to get or to interpret. Several development teams have used measures of vocational maturity and decision-making as a yardstick for effectiveness, but these measures are themselves in the process of development and experimentation. Also, since all projects have relied primarily or exclusively upon external funding, monies have been unavailable for longitudinal studies in the effects of use of a computer-based system.

A final trend has been the need for big-business marketing and support capabilities, to make these systems survive. Systems have been typically developed by small teams of research-and-development-oriented educators. Once systems are completed, most have either been placed in public domain or made available by a not-for-profit educational operation. The first avenue of dissemination has been especially ineffective because there is no organization to handle the very sizable tasks of responding to inquiries, in-service training, marketing, installation, assistance with localization and maintenance of data files. This is a formidable list for a local educational site to take on.

The second method of dissemination has been more effective, but small organizations have had a real financial struggle since it takes at least two to three years of orientation and education before a local education agency implements a computer-based system. The release of such programs for large-scale marketing for profit-making businesses may be a better avenue for dissemination, but poses the problem of adequate guidance representation and understanding of the system by those who do the face-to-face marketing.

What to Consider When Installing Computer-Based Practices

The school or agency which considers the implementation of a computer-based guidance system needs to face and adequately respond to the following questions:

1. What are the objectives of the overall career guidance program? Is a computer-based guidance program the most effective way to meet some of these objectives? Which of these objectives should be met by counselors, by curriculum or by computer? How will the curricular and counselor-delivered parts of the program be closely integrated with the computer-delivered part of the program?
2. Are counselors in real support of the implementation of a computer-based guidance program? Can they operate in harmony with the system without fear of replacement? Will they spend time and effort in understanding the system and helping students to make maximum use of its capabilities? Will they become involved in localization of the system, if this is an option?
3. Is the administration in support of the implementation of a computer-based guidance system? Are the administration and school board sufficiently committed to provide long-term support?
4. Are there sufficient funds available on a long-term basis, apart from special-purpose funding, to support the installation and continuing maintenance of the system?

5. Are there sufficient computer hardware, software, and personal resources to support good operation? Is the computer staff adequately informed, involved, and committed to the implementation and ongoing maintenance? Can guidance and computer personnel communicate adequately?
6. Can the mechanics of implementation and operation be adequately handled, including adequate space for terminals, publicity or adequate time for scheduling of students to use the system?
7. Is there adequate time and money to devote to in-service training of staff and to an ongoing evaluation plan to measure the effectiveness of the system?

The school or agency which sets out to select a computer-based guidance system will not find the choice a very difficult one. This is true for two reasons: (1) few systems are available, and (2) the decision is largely dictated by the kind of hardware available at the local site. Also, it is unlikely that more than two of the existing systems will run on the available hardware. Nevertheless, the following criteria may be helpful in judging the quality of the system being considered:

1. The content of the system should be based upon good career development theory, practice, and research.
2. If personal data about the student are acquired or stored in the system, maximum care should be exercised to protect the privacy of these data.
3. The instructions and routines for student and/or counselor use of the system should be easily understood and usable.
4. The dialogue of the system should be as highly interactive as possible with a minimum of page turning kinds of information-giving.
5. The data bases in the system should be as accurate and recent as possible and should have some planned strategy for periodic updating.

6. The user should be in maximum control of the system and should be constantly informed about the implications of choices made at the system.
7. The system should be free of sex bias in its dialogue, data files, and program routines.
8. Evaluative data should be made public and should be positive in nature.
9. The system should be cost effective. Judging this is extremely difficult. Present systems are costing \$2 to \$5 per hour at the terminal. Therefore, the question has to be asked whether the same service could be as effectively provided in another way at a lower per hour cost.

Developers of computer-based guidance systems have worked hard at short-term evaluation of their systems. The task has been a difficult one due to limited funding, lack of research control, and lack of precise measuring instruments. The kinds of studies which have been done fall into four categories: user reactions, parent reactions, data from testing, and comparison with counselor functions. The findings which seem to be common to systems are summarized under these categories:

User Reactions

1. It is a general finding (Impelletteri 1968; Bohn et al. 1970; Harris 1972; Chapman et al. 1973; McKinlay et al. 1971; Harris-Bowlsbey et al. 1976) that the large majority of students like to use computer technology, do so easily and do not feel dehumanized by it.
2. Students report (Impelletteri 1968; Chapman et al. 1973; McKinlay et al. 1971; Harris 1972; Harris-Bowlsbey et al. 1976) a number of positive effects:
 - a. Increase in self-knowledge (interests, aptitudes, values)
 - b. Increase in broad occupational knowledge

- c. Increase in knowledge about specific occupations
- d. Increase in crystallization of career plans
- e. Receiving good and sufficient information about occupations and educational institutions
- f. Preference for receiving information by computer over traditional paper methods
- g. Increased vocational exploratory activity, including reading, sending for materials and talking to people

Parent Reactions

Parent reactions are overwhelmingly favorable. The Education and Career Exploration System (ECES) and DISCOVER placed emphasis upon collecting evaluative data from parents (Myers et al. 1971; Harris-Bowlsbey et al. 1976). In both cases, parents validated the need for additional career guidance for their young people and reported an increase in family discussion and participation in career planning.

Data from Testing

Education and Career Exploration System (ECES), Computerized Vocational Information System (CVIS), System for Interactive Guidance Information (SIGI), and DISCOVER have measured the effect of student use of their systems in terms of change in vocational maturity. ECES, CVIS, and DISCOVER used the Career Development Inventory (Super et al.) as a post-test measure with an experimental-control group design. Statistically significant increases in vocational maturity were found as a result of using ECES (Myers et al. 1972) and CVIS (Harris 1972) for 4 to 5 hours, but not in the case of DISCOVER (Harris-Bowlsbey et al. 1976). Pyle and Stripling (1976) used the Career Maturity Inventory (Crites 1973) with SIGI and also found an increase in vocational maturity.

The other variable which has been researched is occupational knowledge. Harris (1972) and Maola (1974) measured

occupational knowledge in an experimental-control group design using self-constructed instruments. Both found a statistically significant increase in occupational knowledge as a result of the use of CVIS.

Comparison with Counselor Functions

Melhus (1973) researched the relative effectiveness of CVIS and counselor treatment for vocational planning with top and bottom quartile sophomore students. His findings indicate that top quartile students make good and equal progress in vocational planning by either CVIS treatment alone or counselor treatment alone. On the other hand, bottom quartile students make better progress by counselor treatment alone than by computer-treatment alone.

Price (1973, 1974) compared the effectiveness of CVIS Select-A-Course (a computerized self-registration program) with individual counselor treatment for the exploration and selection of high school courses. Using four measures, no significant differences were found either short-range or one year later between the counselor assistance and computer assistance with registration.

Myers (1972) and Messana (1977) measured the effectiveness of combined computer-counselor support with ECES and CVIS respectively. Both found significant increases in desired vocational planning behaviors and skills with the use of systematic treatment which integrally combines the counselor and the computer.

An Illustration of a Computer-Based Practice

After having completed CVIS at Willowbrook High School (Villa Park, Illinois), members of the development team were eager to create a new computer-based system which would profit from the experience gained and hopefully move the technology forward. Funding was secured from a combination of sources including the Illinois Division of Vocational-Technical Education, the United States Office of Education and the Exxon Foundation. Between 1972 and 1977 two versions of DISCOVER, the secondary

school-level version and the college-adult level version, were developed and field tested. DISCOVER is now maintained by and available from a not-for-profit foundation, DISCOVER Foundation, Inc., Box 363, Westminster, Maryland 21157.

DISCOVER (A Computer-Based Career Guidance and Counselor-Administrative Support System)

DISCOVER is a systematic career guidance program designed to enhance normal career development for grades seven through twelve. The study of career development theory makes it clear that a career guidance system should include at least the following components:

1. Self-information, including values, interests and competencies
2. Exploration of occupations in a systematic way
3. Teaching and low-risk practice of decision-making
4. Relationship of self-information to occupational alternatives
5. Informational assistance with implementation of choice

DISCOVER provides assistance in all of these areas through 12 modules of interactive content.

Data about the user, including school courses and grades, test information, extracurricular activities, and work experience, are stored in the system for use in comparing occupational or training requirements with the user's past experience. Seven large data banks, along with occupations, four-year colleges, two-year colleges, technical and specialized schools, apprenticeships, military training programs, and graduate and professional schools, support the student's search for occupational and educational alternatives.

DISCOVER is a combination of originally developed interactive dialogue and simulations of instruments and tools used by permission of other developers, and of both originally developed and borrowed data files.

The main line modules of the system, designated by numerical codes, are described on the following pages:

00 — Entry

The entry module introduces the user to the System, teaches the user how to use the terminal and explains the many special features of the System. It monitors each person's use of DISCOVER, recording each entry and exit point to facilitate long-term use and review. Each user has the opportunity to complete an on-line survey of career development. This survey is scored and the results serve as the computer's guide in suggesting which modules of the System will be most appropriate for a given user.

1A — Understanding My Values

This module contains a number of experiences which lead the user to think about what a value is, to analyze personal values and to decide upon actions to implement those values. The module defines nine specific values related to occupations.

1B — Playing a Values Game

This module is a monopoly-like game designed by the DISCOVER team. The purpose of the game is to assist users to relate the values learned in the previous module to specific occupations. The computer rolls the die and moves the player around a 28-square game board. To win, a player must accumulate 50 points by the end of three rounds of the board. As the player lands on a given square, the player is asked to identify one occupation in a list of five which best combines the two work values of the student's choice. Choice of the correct occupation *scores*. In order to create more interest, students randomly receive messages on some squares like "your friends seem to be getting ahead faster than you are. This has caused you to wonder if the values you have selected are worth it. During this time your score remains the same." The way in which decisions are made on the *decide* squares adds points toward the values for which the player is playing the game. The game ends when the player receives the score previously set under the categories of income, recognition, and happiness.

2A — *Learning To Make Decisions*

This module attempts to teach a planned decision-making process by presenting the steps of the decision-making process in example and flow chart form. The System provides a number of exercises designed to illustrate and provide practice in the decision-making steps. It also illustrates other non-planned decision-making strategies (impulsive, delaying, painful) and assists the user to identify the user's present style of decision-making.

2B — *Practicing Career Decisions*

This module makes use of a *career decision tree* as an organizing principle for understanding how decisions affect occupational choice. Since each of the 20 branches of the tree represent a group of occupations, the tree structure is used (1) to show the key decisions which lead to entry into a given occupation, (2) to plot a given user's course up the branches of the tree, (3) to simulate the career plans of others, and (4) to allow the user the opportunity to *play* the user's own life in a variety of ways by making decisions in this low-risk, simulated way.

3A — *Learning How Occupations Can Be Grouped*

This module presents the world of work through two organizing principles: the data-people-things-ideas division (which is the American College Testing Program's refinement of the *Dictionary of Occupational Titles* classification system) and the Holland System. A number of exercises are presented to give the student practice at using these classification systems. The student's responses are monitored to provide more instruction if needed.

3B — *Browsing Occupations*

This module makes use of the Holland classification system presented in Module 3A as an organizational structure by which the user can browse the world of work. The module allows the user to touch any two points of the Holland hexagon segment of the circular world of work. The user may select titles from the list and receive a one-display description of the occupation's work setting and work tasks. This module contains descriptions of approximately 500 occupations.

4 — *Reviewing My Interests and Strengths*

This module is Holland's *Self-Directed Search*. Administered on-line, this instrument is a self-report of the user's career-related interests, experiences, and competencies. The data, collected via the items on the instrument, give the user a focus for exploration in the world of work. The results of the instrument are interpreted to the user on-line.

5 — *Making a List of Occupations to Explore*

This module provides the user with five alternative ways to make a list of personal vocational options: (a) by relationship of occupations to personal work values, (b) by use of the results of the *Self-Directed Search*, (c) by selecting titles from a list of occupations by the terminal, (d) by combining selected occupational characteristics (such as salary level, place of work, level of training, degree of independence, etc.), and/or (e) by relating favorite school subjects to occupations.

6 — *Getting Information about Occupations*

This module allows the user to get extensive information about the occupation on the user's list. By the voluntary selection of as many of the 21 questions as desired, the user may receive information about an occupation, its duties, benefits and limitations, educational requirements, future outlook, and additional sources of information. The user leaves this module with a list of occupations in which the user has serious interest. This list may be a shortened form of the list which the user entered the module, or it may be a new list which has been generated on the basis of information gathered in this module.

7 — *Narrowing My List of Occupations*

The user enters this module with the list of occupations from the previous module or with a new one which the user generates at the beginning of the module. The purpose of this module is to assist the user to narrow the list further so that the user leaves the module with a first choice occupation in mind and a limited number of others in priority order. This narrowing is assisted by the capability to (1) ask for additional information about any occupation on the list, (2) compare information about any two

occupations, and (3) analyze the remaining occupations in light of identified work values, desired level of training, and interests and competencies. Finally, the user is asked to remove occupations which are no longer of interest and to put the others in priority order. The user leaves the module with a top-priority selection.

8 — *Exploring Specific Career Plans*

The user enters this module with one specific occupation at a time. The System identifies for the user all of the possible paths of training to the selected occupation. The user may choose the path of entry which the user wishes to explore in depth and branch to any of the following sub-modules of the System.

8A — *Local Jobs*

This module provides an informational section about how to seek a job. It also provides a search strategy for finding a job in the local area with the characteristics desired by the user. Use of the search strategy requires that each local site develop a local job data bank.

8B — *Financial Aid*

This module provides three capabilities: (1) definition of standard financial aid terms, (2) information about how to obtain financial aid, including an on-line assessment of student financial need (based on a short form of ACT's Family Financial Statement), and (3) information about available sources of financial aid.

8C — *Apprenticeships*

This module provides two capabilities: (1) answers to common questions about apprenticeship programs, and (2) search strategies to find apprenticeable occupations, including locating local companies which sponsor apprentices in the user's chosen occupation (requires local data file development).

8D — *Four-Year College Information and Search*

This module is a very extensive one which has two divisions: exhaustive information about college admission and selection and a search strategy. The search strategy draws upon a data file of all

four-year colleges and universities in the nation, collected and maintained by the American College Testing Program. The strategy allows the user to combine characteristics in the following areas: approximately 200 majors, cost ranges, enrollment ranges, geographic locations, levels of competition for admission, student characteristics (test and class rank, sex, and racial/ethnic membership), type of control, type and size of community, type of institution, type of school year calendar, and a variety of special features. Combination of the student's selected variables produces a list of colleges which have the desired characteristics. Five displays of specific information are available about each college: entrance requirements, general information, characteristics of the freshman class, majors offered, and cost and financial aid.

8E — *Community and Junior Colleges*

This module provides answers to common questions about community and junior colleges and search strategies to find a college. Two strategies, search of local college only or search of a nationwide file, are provided. DISCOVER sites may choose to use only the local search. The DISCOVER-provided college data file contains the data with which to do both searches.

8F — *Graduate and Professional Schools*

This module provides a search through a national data file of graduate and professional schools making use of characteristics very similar to those used in the four-year college search, module 8D.

8G — *Technical and Specialized Schools*

Similar to other modules in this group, this one provides general information about technical and specialized schools and a search strategy to find those which will provide the training needed for entry into a specific occupation. The data file provided by DISCOVER is a national one, containing information about approximately 11,000 schools. The local site may choose to use only a part of this file.

8H — *Continuing Education*

This program has two sections: (1) general information about adult and continuing education, and (2) instruction on how to find

adult-continuing education opportunities in the local area. A local site might choose to enhance this module by adding a local data file of continuing education opportunities.

81 — Military Information and Search

This module provides answers to a large number of typical questions about the military. Additionally, it provides a search strategy to find the specific program within any branch of the military which provides the training needed for entry into a specific civilian occupation. The module contains the data file published in the Department of Defense's *Military-Civilian Occupational Source Book*.

Abstracts of Selected Practices

Direct Inquiry System without Monitoring

The *Career Information System* (CIS) is a state-wide system in Oregon. It operates on IBM and Hewlett Packard computers with typewriter terminals. The system has six components: (a) QUEST, an on-line questionnaire which assists users to assess interests and abilities, leading to the identification of occupations in the data file which have the characteristics desired by the user, (b) information about occupations selected by the user, including local manpower data, (c) information about training opportunities within the state, (d) bibliography of reference materials for further information, (e) taped interviews with workers in each of the 230 occupations in the data file, and (f) local persons who are willing to discuss their occupations with students. This system has served as the model for several of the eight state-wide information systems funded by the Department of Labor. For further information, write: Dr. Bruce McKinlay, 247 Hendricks Hall, University of Oregon, Eugene, Oregon 97403.

The *Guidance Information Systems* (GIS) is a commercial system which made use of some of the ideas employed in the Information System for Vocational Decisions. This system, currently marketed by Time Share Corporation and Houghton-Mifflin, is a direct inquiry system without monitoring. It

offers the user an interactive search of five data files by entering coded characteristics which are explained in the user manual. These files are two and four-year colleges, graduate schools, specialized schools in some regions, occupations, and financial aids. The user receives both a list of options and descriptive information about each. For further information write to: Time Share Corporation, 3 Lebanon Street, Hanover, New Hampshire, 03755.

Direct Inquiry Systems with System Monitoring

The *Computerized Vocational Information System (CVIS)*, developed at Willowbrook High School in Villa Park, Illinois, makes use of an IBM 360 or 370 computer and cathode ray tubes. The system has three distinct parts: the guidance system, the computer-assisted instruction system, and the administrative system. The guidance system has 10 subsystems: vocational exploration at junior high level with associated visual materials; vocational exploration at secondary school level; four-year college information and search; community college information and search; technical school information and search; apprenticeship information; military information; local job search; financial aids search; and student registration. The CVIS system is owned and distributed by the CVIS Consortium, Inc., and has been broadly distributed. This Consortium of users maintains its data files and shares in new developments. Further information about the CVIS system can be obtained from: CVIS Distribution Center, Western Maryland College, Westminster, Maryland 21157.

The *Education and Career Exploration System (ECES)* was originally developed by the IBM Corporation. It was given to the state of Michigan and is operational in Genesee Intermediate School District in Flint, Michigan. New developments and modifications of the system are constantly underway at the site of operation. ECES IV, the latest version, makes use of a cathode ray tube terminal, a microfiche reader, and an IBM machine. ECES provides four on-line components and one off-line component. The on-line ones are exploration of 400 occupations with job duty samples, exploration of 400 post-secondary majors and teaching and practice of

decision-making. The off-line component is a batch-process search of educational institutions, including four-year colleges, two-year colleges, and technical-specialized schools. For further detailed information write to: Mr. Alva Mallory, 2413 West Maple Avenue, Genesee Intermediate School District, Flint, Michigan 48507.

The *System for Interactive Guidance and Information (SIGI)* was developed by Educational Testing Service, Princeton, New Jersey. This system, unlike the others described here, is specifically designed for community college students. The system offers four subsystems: (a) Values, (b) Information, (c) Prediction, and (d) Planning. The first describes 10 occupational values, assists the user to weigh them, and identifies occupations which may fulfill the user's combination of them. The second subsystem provides information about occupations selected by the user. The third allows the user to receive predictive statements about probability of success in given courses or curricula related to his or her occupational choice. The fourth assists the user with specific step-by-step planning toward implementation of career choice. The system is designed to operate on a stand-alone PDP-11 minicomputer with multiple cathode ray tube terminals. Further detailed information can be obtained from: Dr. Martin R. Katz, Educational Testing Service, Box 592, Princeton, New Jersey. 08540.

References

- Bohn, M.; Lindeman, R.; and Super, D. *The ECES: Field Trial and Evaluation*. Paper presented at the Convention of the American Educational Research Association, Minneapolis, March 6, 1970.
- Chapman, W.; Morris, B.; and Katz, M. *SIGI: Report of a Pilot Study Under Field Conditions*. Princeton: Educational Testing Service, 1973.
- Crites, J. *The Career Maturity Inventory*. Monterey, California: CTB/McGraw-Hill, 1973.

- Dudley, G. A., and Tiedeman, D. V. *Career Development: Exploration and Commitment*. Muncie, Indiana: Accelerated Development, Inc., 1977.
- Ellis, A., and Tiedeman, D. *Can a Machine Counsel?* Boston: Harvard University School of Education, 1968.
- Gallagher, J. *Computer-based Vocational Guidance System*. Washington, D.C.: United States Government Printing Office, 1969.
- Harris, J. *Toward Guidelines for Computer Involvement in Guidance*. Commission Report. Washington, D.C.: National Vocational Guidance Association, 1971.
- Harris, J. *Analysis of the Effects of a Computer-based Vocational Information System on Selected Aspects of Vocational Planning*. Unpublished doctoral dissertation, Northern Illinois University, 1972.
- Harris-Bowlsbey, J. *Career Guidance Needs of the Nation's Youth and Adults*. A study for the National Institute of Education. Washington, D.C., 1975.
- Hummel, T.; Shaffer, W.; and Lichtenberg, J. *Client 1: A Computer Program which Simulates Client Behavior in an Initial Interview*. Paper presented at the annual convention of the American Educational Research Association, New Orleans, 1973.
- Impellitteri, J. *Computer-assisted Occupational Guidance (CAOG)—The Development and Evaluation of a Pilot Computer-assisted Occupational Guidance Program*. University Park, Pennsylvania: Pennsylvania State University, Vocational Education Department, 1968.
- Maola, J. *Comparison of Computer-based vs. Counselor-based Occupational Information Systems with Disadvantaged Vocational Students*. Unpublished doctoral dissertation. Akron, Ohio: University of Akron, 1974.

- McKinlay, B., and Adams, D. *Evaluation of the Occupational Information Access System as Used at Churchill High School. A Project Report*. Eugene, Oregon: University of Oregon, 1971.
- Melhus, G.; Hershenson, D.; and Vermillion, M. "Computer-assisted versus Traditional Vocational Counseling with High and Low Readiness Clients." *Journal of Vocational Behavior*, 3, 137-144, 1973.
- Messana, J. *A Study of the Computer-assisted Guidance and Counseling Project in Oakland County, Michigan*. Pontiac, Michigan: Oakland Schools, 1977.
- Myers, R.; Lindeman, R.; Forest, D.; and Super, D. *Preliminary Report: Assessment of the First Year of Use of the ECES in Secondary Schools in Genesee County, Michigan*. New York: Teachers College, Columbia University, 1971.
- Prediger, D., Roth, J.; and Noeth, T. *Nationwide Study of Student Career Development: ACT Research Report*, No. 61, 1973.
- Price, G., and Johnson, R. "Computer-assisted Course Selection." *Journal of Counseling Psychology*, 20, 327-331, 1973.
- Pyle, R., and Stripling, R. "The Counselor, the Computer, and Career Development." *The Vocational Guidance Quarterly*, September, 71-75, 1976.
- Super, D. et al. *Career Development Inventory*. New York: Teachers College, Columbia, 1975.
- Tiedeman, D. *An Information System for Vocational Decisions (ISVD): Cultivating the Possibility for Career through Operations*. Boston: Harvard University School of Education, 1966.

PART III

INSTALLATION STRATEGIES FOR BUILDING COMPREHENSIVE CAREER GUIDANCE PROGRAMS

The preceding chapters have identified a voluminous range of excellent career guidance practices which, if adopted, could significantly raise the quality of career guidance programs. But the realities of the past have taught us to proceed with guarded optimism. The installation of any innovation, regardless of size, can be a major undertaking. We need to maintain our enthusiasm for visualizing better programs and at the same time face the arduous tasks of adopting practices which will insure better programs. Chapter 8 is intended to assist you with this challenge. An early section of the chapter discusses change agent roles for counselors. The next section outlines a seven-step strategy for effecting changes in career guidance. Finally, the chapter concludes by reviewing roadblocks to change.

Chapter 8

Strategies for Adopting, Implementing, and Evaluating Career Guidance Practices

"We have a very special computer system here," the leader noted with barely suppressed excitement. "It is a several-generation upgrading of the H. G. Wells Time Machine. It enables us to project ourselves forward or backward in time, making it possible to see how a person with the attitudes and behaviors of one time period would fare many years earlier or later."

The leader observed, with pleasure, the surprised looks and obvious interest of the group. "Today we are going to investigate the changes which have occurred in guidance in the last 25 years by introducing typical counselors of the fifties to the current guidance scene. Basically, we want to identify the changes that have occurred in guidance practices by noting how well the 1950-vintage counselors perform in 1977, observing how they cope in 1977 with methods and procedures developed almost three decades earlier. Our observations should be very useful in assessing changes that have occurred in guidance practices, how these changes have occurred, and what we can do to improve the change process in guidance."

All group members had their turn at the Time Machine and concluded the exercise by writing a scenario of "Guidance '77—From the Perspective of a '50 Counselor." The participants were eager to share their scenarios, and the ensuing discussions were lively with ideas and reactions. The group concluded the discussion by creating a master list of conclusions about how counseling practices in 1977 differed from those of the fifties:

1. There is now greater diversity in guidance programs and practices. The range of procedures, human as well as technological, and the types of organizational patterns were far greater in the seventies.

2. There is greater emphasis on meeting the special needs and interests of sub-populations—minorities, women, the elderly, and the handicapped, for example.
3. There are more legal and social constraints on the types of practices that could be utilized. Testing programs, hiring practices, rights of individuals, and relationships with parents and the community were matters of statute rather than individual counselor decision-making.
4. There is more emphasis on guidance programs and the delivery of guidance. This was in contrast to an earlier emphasis on counseling of individual clients by individual counselors.
5. There is prioritization of career guidance and career planning. In the fifties the emphasis was limited to educational planning and personal counseling.
6. There is more responsiveness to documenting the outcomes and the utility of guidance and counseling. The age of accountability (the seventies) has led to the need for supportive evidence that the program "works" in ways that enhance student potential.

The group was fairly satisfied by the consensus statements. The leader then confronted them by asking, "Okay, how about the larger question of how a fifties counselor would fare today? How would the changes you have identified affect the performance of vintage counselors? Could they perform adequately? Would counselors be ill-equipped to do their jobs?"

The participants lapsed into periods of silence while they pondered the questions. Finally, there was much head-nodding and a general murmur of assent when a previously quiet counselor observed, "There are two things this experience has really driven home for me. The first is that there are more methods available to counselors today than in the fifties. I realize, of course, there are also many more expectations of counselors today. But the really big surprise for me, and the second lesson, is how little counselors make use of what is available to them. It's like having a store that displays all the latest goods, but the customers stick with the same styles and products they have always used. I guess

my general response to your questions is that vintage counselors would manage quite well in many of our guidance programs—too well from my point of view."

Much of the earlier enthusiasm and high spirits of the group were gone as the group contemplated these remarks. Then the leader said, "I sense many of you are disappointed, even depressed, over the outcome of our time voyage. Perhaps you should be. We may have been too content in believing new ideas and methods will, in themselves, make a difference in guidance. We have developed new tools, but we haven't done very much to help counselors acquire and use them. Perhaps the challenge for us is to move from an *awareness* of innovations to *judicious use* of them in our daily activities. We have probably reached the point where performing the same functions better may not suffice to make the qualitative changes needed in our programs. We have to find ways to make it easier for us to use the best of what is available to deal with changing guidance."

The scenario of this time voyage dramatizes the fact that guidance has not been noted for the rapid adoption and diffusion of innovations. Convention programs and professional meetings are replete with speakers who extoll the need for more rapid spread and use of promising new guidance practices, admonishing counselors to change their ways, to innovate and implement more effective practices and programs.

However strong these admonitions, the fact remains that counselors have been trained to practice their arduously acquired skills. They are not prepared to update previously learned skills on a regular basis. For many counselors, improvement in guidance practices means offering the same practices more skillfully, with more counselor power. It appears this approach will not suffice to meet the needs of the diverse client populations that counselors serve in the seventies. Only a new perception of the counselor role, and requisite skills to implement this new role, will be acceptable in this new era.

While the specifics of this new counselor role may vary, it appears that the role of the complete counselor of the present will encompass the following:

1. Responsiveness to change and a willingness to innovate programs and practices

2. The capacity to define guidance services in terms of goals, objectives, and behavioral outcomes and to design programs that respond to them
3. Ability to work as a member of many different groups devoted to achieving specific guidance objectives
4. Dedication to continuing assessment of client and support group needs and wants
5. Commitment to continuing evaluation of practices and programs and to revision thereof, as determined by the evaluation
6. A professional role definition and the skills to back it up, including skill in change agency, i.e., being a force for change in the counselor's work environments
7. Resource resourcefulness, the zealous pursuit and acquisition of validated, innovative programs and practices
8. Strong commitment to personal and professional renewal, to replacing previously learned attitudes, skills, and abilities with ones more appropriate to present and emerging demands and needs

Many conclusions may be drawn from a review of these statements. One that certainly stands out is *change*, the counselor's acceptance of it and skill in effecting it appropriately, judiciously, and skillfully. Change has always been the counselor's companion. The goals of counseling, after all, have focused on helping clients to change their perception of themselves and/or their life space, and to adopt appropriate behavior changes. What is new is that counselors are experiencing an urgency to effect changes in their personal and professional selves, as well as in their work environments.

In an earlier era, counselors in a laissez-faire manner would make whatever changes seemed appropriate in their own way and at their own behest. With guidance becoming a systematic response to identified needs, change in one component of the system (the counselor) is affected by other components (parents, teachers, students, community members), who in turn are affected by changes in the counselor's behavior. Counselors now are not an island unto

themselves, if they ever were, and the changes they make must be the result of a carefully planned process.

The relative simplicity of changing a personal counseling style has given way to the more challenging task of deciding how to facilitate the adoption of significant career guidance innovations by an entire school. In one of the major career guidance developments in recent years, the *Career Planning Support System*, hereafter called CPSS (outlined in The Center for Vocational Education Annual Report, FY 1975), the staff found that the program itself had few problems, rather "... the introduction of the program itself is the problem" (p. 12). In reviewing the lessons learned from the program development, Dr. Robert Campbell, project director of CPSS, asserted that the major problem associated with developing an effective career guidance system was "... the problem facing any educational innovations: implementation and *the attitude of the staff towards change*" (p. 16).

Most strongly needed is a counselor strategy for effecting change. The ultimate outcome for any new career guidance practice may well depend upon the orientation of the staff toward the adoption and implementation of new practices and the roles that will be played by different staff members. The importance of planned change to the counselor is aptly summarized in the statement that "counselor effectiveness, even survival, will depend upon the counselor's willingness and ability to be an active participant in facilitating change" (Walz and Benjamin 1977).

Internal and External Change

Individuals committed to bringing about change within a given system may operate either as internal or external change agents. Most counselors will operate as internal change agents, working to bring about change within their own systems. This may cause problems. Because counselors view the system from their own experience and relationship to it, their perception may be biased. They may lack power in the system, or they may be so closely identified with previous programs and activities that others may find it difficult to accept them in the role of change agent.

However, there are inherent advantages to being an insider. Counselors usually have freedom of movement. Counselors usually

know and are known by the system—they speak the language, know the norms and can relate to the system's needs and interests. In many ways, counselors are in an excellent position to assess the impact of the system on its members—knowing what the system does to people in its efforts to do something *for* people, being aware of what is going well and what may be causing unhappiness or dissatisfaction.

Four Change Agent Roles for Counselors

Counselors may operate as change agents in four basic ways (Walz and Benjamin 1978).

1. Energizing the system to change and prodding the system to do something about its problems, is a very useful function counselors can perform. Identifying unmet needs, speaking to incongruities between system and goals as well as deliverance on those goals can motivate a system to change.
2. Counselors can be insightful regarding needed changes and offer solutions. They can generate a number of alternative solutions and help the system to realize that there *is* a choice.
3. Many times systems are static because they lack the resources necessary to effect change—informational materials, financial backing, diagnostic skills, and knowledge regarding the process of change. Counselors can help by acting as resource linkers, persons who know where to obtain the human and physical resources pertinent to the system's needs.
4. Both by attitude and experience counselors are uniquely qualified to perform as process consultants, assisting the system in problem-solving and in learning how to develop the capacity for self-renewal. Because they are counselors, they may already be performing a number of consultant functions. Expansion of counselors' consultant roles to include the change process may in many instances broaden the scope of their consulting rather than

dramatically change it. Although in practice counselors may at various times perform all four change agent roles, it is the process consultant role for the counselor that is emphasized here.

A Strategy for Effecting Changes in Career Guidance

Career guidance programs will change on a planned, systematic basis, or they will change through ill-thought-out efforts to respond to pressing problems. A specific change model for use by career guidance personnel has been developed by Walz and Benjamin (1978).

The model describes a seven-step process which can be adapted to fit different circumstances. The seven steps which are not mutually exclusive, and may occur sequentially or with several steps at one time, are: (1) establishing the need, (2) building interactive relationships, (3) assessing, (4) generating options, (5) deciding, (6) facilitating adoption and implementation, and (7) refining and renewing.

1. *Establishing the Need.* Although change-active counselors may see clearly the need for change, chances are good that others do not, in reality or by design. Most people become established in certain roles and ways of behaving and want to keep things as they are. The counselor's first task may be to jar the client system out of its complacency and create a sense of dissatisfaction with what is. This can be done in several ways.

The most common method of motivating a system to change is through a needs assessment. Words pale beside documented evidence that a majority of students, parents or faculty is experiencing an unmet need. Exposure to different ways of doing things can be an effective motivation—visitations to areas where innovative practices are in operation, participation in conferences or training workshops, or attendance at presentations by dynamic consultants or program developers.

Brainstorming sessions in which staff members and students "blue-sky" optimum programs or outcomes can begin the process of overcoming inertia and enhance movement toward change. Change also may be forced upon a system by various pressure groups who refuse to be silenced until their demands for change are recognized. In this instance, the first step in the change process has occurred without the change agent, and work can begin in the next. The first step is crucial. Without a nucleus of people motivated to change, the next steps become extremely difficult.

2. *Building Interactive Relationships.* Usually change-active counselors can find immediate allies in the client system, persons who recognize the need for change and are willing to underwrite the change effort in attitude if not action. Regardless of whether these persons have power, they can provide a core of support. It then becomes important to identify key authority figures, those with the legal trappings of authority and those who carry psychological clout in the system, by reason of longevity or personal influence, and involve them in the change process. Also important, is the inclusion of leaders of special interest groups, as well as representatives of various populations who may be involved in the change effort.

With all of these individuals, counselors need to work to establish openly communicative and mutually trustful relationships. Efforts toward this end will go far to overcome potential barriers and resistance as the move toward change gains momentum.

As counselors interact with members of the client system, they will begin to identify individuals for the team that will spearhead the change, persons who can work together harmoniously, who have diverse skills, and who are committed to the task.

3. *Assessing.* Before proceeding any farther, change agents will want to make an assessment of the client system—of people, resources, facilities, and methods of operation.

Often this process unearths a formidable number of problems, and change agents should avoid undue emphasis on the negative. Just as important, is determination of the strengths and capabilities within individuals and components of the system that have potential for successful change. Focusing on more positive aspects of the system fosters hope and optimism, a belief that the system has the power and resources to make change happen. The use of an organized, systematic approach to assessment such as the "Client System Assessment Inventory" (Human Development Services, Inc. 1977) greatly facilitates this process.

A crucial result of the assessment procedure is clear identification of the nature of the problem and agreement among all relevant parties on the target for change. This is the time for setting goals, and defining to everyone's satisfaction, the desired outcomes of the change effort.

4. *Generating Options.* In this step, the really creative part begins. The other steps are preliminary to the excitement of generating possible ways of responding to the problems. The focus here is not on *one* solution, but on the widest number of possible solutions. This step can begin with a future-imaging warm-up. Team members can imagine what their system would be like if they had developed it and what can be applied to each of the options under consideration. However, even as systematic a method as this, does not always result in easy identification of the best solution. Almost always some modification or change in the innovation will be required. Few organizations have the staff, time, or money to reshape entirely, a program or practice; how much modification, therefore, becomes important to the decision to adopt.
5. *Deciding.* Deciding is a shared responsibility. The entire change team must be committed to the decision to some degree. Working for change is hard enough without squabbling or dissension among major proponents of the change, and the change agents must use utmost skill in binding the members into a cooperative working team, obtaining consensus on the solution, maintaining motivation and optimism.

6. *Facilitating Adoption and Implementation.* The groundwork is now laid for actually putting the change in action, but the real test is yet to come. The change agent is now about to find out whether the innovation is indeed workable and acceptable to members of the client system. Understanding the phases through which individuals, groups, and organizations customarily pass as they decide whether or not to adopt will be important to making the plan a reality. The change agent needs also to be aware of individual variance in rate of progress through the phases and of change agent behaviors appropriate to each phase.

Keeping the leaders of various groups informed of progress and getting them to make public their commitment to the project, enhances the adoption process. Change agents will also want to identify resisters and find out the reasons for their resistance. They can then take a proactive stance by providing more information, being ready with sound answers to legitimate concerns, and making it possible for people to see the innovation at work.

Communication, the key to gaining acceptance of a plan, takes many forms. The means of communicating will depend on a number of variables. Being aware of the numerous possibilities of presenting information will help change-active counselors to combine them in the manner most effective for their needs. Along the way they may find they have to make some compromises, modify the plan further, revise target dates or back off completely to deal with side issues. Flexibility is an essential criterion in developing successful adoption strategies.

7. *Refining and Renewing.* Part of any program for change should be provision for periodic refinement. As members of an organization gain experience and data from a trial of the innovation, they need time to reevaluate it and decide on possible further modification. If users know that the innovation will be up for review after a reasonable trial period, they will be more willing to try it out, to put up with initial feelings of awkwardness, and to

accept any initial inconvenience. If they know that they will be called upon to participate in the review, they will observe more carefully, be ready to offer useful suggestions for improvement and deepen their commitment to the change effort. And, if they are able to refine and reshape the new program or practice to meet changing needs, they will be more likely to continue using it effectively.

While refining is an ongoing activity concurrent to use of the innovation during the trial and stabilizing stages of adoption, renewing is a conscious, planned effort to review and evaluate outcomes. Renewing may result in the determination that outcomes are as expected and the program is achieving its goals. On the other hand, the renewal procedure may reveal that because of changing circumstances the program is obsolete, no longer responsive to existing attitudes or needs. Systems that incorporate and use this renewing feature possess an objective attitude toward existing activities and are willing to discontinue an innovation when something better comes along.

The final goal of the renewing process will be for the client to have the capacity and skills for self-renewal, including a positive attitude toward change, skills in facilitating change, active searching out of new ideas and resources, and keeping on top of the present through careful preparation for the future.

Roadblocks to Successful Change Efforts

Many counselors have tried to change career guidance programs and practices. Sometimes the experience has gone well, but more often some kind of obstacle has interfered with the change effort. A balanced perspective on change, plus knowledge of the factors affecting change, can help in the successful application of the seven-step change strategy.

A number of authors have identified problems that are typically encountered in change efforts (for example, Arends and

and Arends 1977). Our experience suggests that major difficulties can be grouped into five categories: (1) nonspecific change efforts, (2) disregard of previous change efforts, (3) hit-and-miss change, (4) authoritative change and (5) "glacier change" approach.

Nonspecific change efforts. A difficulty often encountered in change efforts is a lack of specificity about what is to be changed. Frequently, the motivation to change stems from other than a well-defined need. Opportunism in the form of grants or special projects may lead program developers to undertake changes in practices or program goals that are not a response to genuine problem-solving, but rather a stratagem to gain more money and/or staff. Typically, without clear-cut goals or targets, enthusiasm wanes and the change efforts drifts off into meaningless activity. It is crucial that whatever change undertaken be an effort to overcome or improve existing conditions, as well as one which enlists the full participation of the staff.

Disregard of previous change efforts. Past change efforts can frequently provide clues to system shortcomings and strengths. The attitudes of the staff toward change of any kind are frequently residual from previous efforts and have an important bearing on current response to change. Analysis of what has happened before will provide valuable insights as to what staff behaviors and attitudes should be attended to in a current change effort.

Hit-and-miss change. In considering change targets, counselors will often focus on a single career guidance practice, operating under the assumption that changing a specific practice will not affect the total program. However, experience has shown that such an isolated approach will cause serious problems, and will result in disjointed and unsuccessful change efforts.

A frequent outcome of this single-focus approach is an erosion of the motivation for change and a withering away of the innovation. Installing a new practice that leads to new behaviors and new relationships within a system requires that the authors of change be cognizant of the "interdependencies among personal behaviors, norms, and structures of their organizations" (Arends and Arends 1977, p. 22). A form of mutual adaptation in which there are modifications in both the innovation and the relationships between staff and students is highly desirable. This process of mutual adaptation insures that the innovation will be broadly owned and

and that support will be broadly diffused throughout the organization.

Authoritative change. Guidance staffs sometimes encourage the imposition of change from the outside by their unwillingness or inability to predict and/or respond to important needs. By devoting their efforts to extinguishing brush fires, they leave themselves open to decisions made by outside authorities. Such imposed changes often lack credibility and fail to enlist the support of those who will be most affected by the change. However important it is to deal with urgent, day-to-day problems, counselors must make it a practice to keep on top of significant, emerging needs, be prepared to effect necessary changes, and be alert to broader and more pervasive developments in their systems.

Glacier change approach. Some change agents operate under a "groupiness" phenomenon, as if the more people who are involved in the change process, the greater the likelihood of achieving the project goals. The involvement of all relevant parties in the change process certainly enhances the acceptance and successful implementation of the proposed change. But the point can soon be reached where a variety of conflicting viewpoints strains communication, and progress toward the goals becomes minute or stagnated. The group swells until it assumes glacial proportions. Not everyone should be involved at every stage in the change process. Timing as to when to involve various individuals or groups is of major importance. Sometimes involvement of certain people should be deferred to later stages when varied inputs and reactions are desired.

These obstacles to change are not intended to be definitive or inclusive. Hopefully, they can serve to alert the reader to possible pitfalls which can interfere with the successful implementation of a strategy of planned change.

Conclusion

Career guidance programs will not become more effective solely because innovative practices have been identified, nor will the adoption of a singular promising practice be the catalyst for significant program improvement. Counselors must be as attentive to how they implement a practice as they are to what they implement. They must facilitate changes in career guidance programs and

practices through a planned, systematic process. Only by giving attention to the means used to promote change and by acquiring skills in the process of change can counselors increase the likelihood that career guidance practices will produce significant program outcomes.

References

Arends, R. I., and Arends, J. H. *Systems Change Strategies in Educational Settings*. New York: Human Sciences Press, 1977.

Center for Vocational Education, The. *Developing an Educational Innovation*. The Center for Vocational Education (Annual Report, FY 1975). Columbus, Ohio: The Center for Vocational Education, The Ohio State University.

Human Development Services, Inc. *Client System Assessment Inventory*. Ann Arbor, Michigan: Human Development Services, Inc., 1977.

Walz, G. R., and Benjamin, L. "A Strategy for Counseling Change Agency." *Personnel and Guidance Journal*. Washington, D.C.: American Personnel and Guidance Association, 1978.

. *On Becoming a Change Agent*. Ann Arbor, Michigan: ERIC Counseling and Personnel Services Information Center, 1977.

APPENDIX A

Evaluation Resources for Career Guidance

Adams, Kay Angona and Walker, Jerry P. *Improving the Accountability of Career Education Programs: Evaluation Guidelines and Checklists*. (Career Education Measurement Series). Columbus, Ohio: The Ohio State University, The Center for Vocational Education, 1978.

Buros, O. K., ed. *The Seventh Mental Measurements Yearbook*. Highland Park, New Jersey: Gryphon Press, 1972.

Kester, Ralph J. *Using Observation Techniques in Evaluating Career Education*. (Career Education Measurement Series). Columbus, Ohio: The Ohio State University, The Center for Vocational Education, 1978.

Malak, Sharon. *Assessing Experiential Learning in Career Education*. (Career Education Measurement Series). Columbus, Ohio: The Ohio State University, The Center for Vocational Education, 1978.

McCaslin, N. L.; Gross, Charles J.; and Walker, Jerry P. *Career Education Measures: A Compendium of Evaluation Instruments*. (Career Education Measurement Series). Columbus, Ohio: The Ohio State University, The Center for Vocational Education, 1978.

McCaslin, N. L., and Walker, Jerry P. *Improving and Developing Career Education Measures*. (Career Education Measurement Series). Columbus, Ohio: The Ohio State University, The Center for Vocational Education, 1978.

San Diego County, Department of Education. *Career Tests and Resources*. San Diego: Office of the San Diego County Superintendent of Schools, 1975.

APPENDIX B

Supplementary Sources of Career Guidance Practices

Billings, Mary DeWitt and Rubin, Janet S. (U.S.O.E./D.H.E.W.). *Dealing in Futures: Career Education Materials for Students, Parents, and Educators*. Washington, D.C.: U.S. Government Printing Office, 1977.

Career Education Clearinghouse. The Ohio State University, The Center for Vocational Education, 1960 Kenny Road, Columbus, Ohio 43210. Dr. Marla Peterson, Director. (614) 486-3655.

Counseling and Personnel Services Clearinghouse. University of Michigan, School of Education Building, Room 2108, East University and South University Streets, Ann Arbor, Michigan 48104. Dr. Garry Walz, Director. (313) 764-8492.

Campbell, R. E. et al. *Career Guidance: A Handbook of Methods*. Columbus, Ohio: Charles E. Merrill Publishing Company, 1973. Cost: \$13.45.

EPIE Institute. *EPIE Career Education S*E*T**, Vols. 1 and 2. New York: EPIE Institute, 1974.

Jezierski, Kathleen. *Collage: A Collection of Career Education Resources*. Springfield, Illinois: Illinois Office of Education, State Board of Education, Department of Adult, Vocational, and Technical Education, 1977.

Kimmel, Karen S. et al. *Career Guidance Resources: A Handbook of Resource Abstracts—Grades K-14*. Columbus, Ohio: The Ohio State University, The Center for Vocational Education, 1976. Rural America Series, RD 118A3. Cost: \$16.60.

Kowle, Carol and Trout, Deborah. *Job Seeking and Job Keeping: An Annotated Bibliography.* Madison, Wisconsin: The Wisconsin Vocational Studies Center, 1977.

National Institute of Education (D.H.E.W.). *Catalog of NIE Education Products, Vols. 1 and 2.* Washington, D.C.: U.S. Government Printing Office, 1975.

San Diego County Department of Education. *Career Tests and Resources.* San Diego: Office of the San Diego County Superintendent of Schools, 1975.

APPENDIX C

Career Guidance Related Journals and Newsletters

AVA Guidance Division Newsletter. The Center for Vocational Education, 1960 Kenny Road, Columbus, Ohio 43210. Attention: Helen Rodebaugh. Four/Year.

Career Digest. Indiana Career Resource Center, 1201-09 South Greenlawn Avenue, South Bend, Indiana 46615. Monthly.

Career Education/Career Guidance Newsletter. SIG: CE/CG Newsletter, Division of Vocational and Technical Education, VPI and SV, Blacksburg, Virginia 24061. Included with membership in the Special Interest Group (SIG) on Career Education-Career Guidance, American Educational Research Association.

Career Education Digest. Educational Properties, Inc., 3303 Harbor Boulevard, Suite H-6, Costa Mesa, California 92626. Twelve/Year-\$10.00. Single Copy-\$1.50.

Career Education News. Bobit Publishing Company, 1155 Waukegan Road, Glenview, Illinois 60025. First and Fifteenth of every month (September through June); Fifteenth of the month (July and August). \$50.00 per year (additional subscriptions mailed to same subscriber \$8.50 each).

The Career Education Workshop. Parker Publishing Company, Inc. Route 59A at Brookhill Drive, West Nyack, New York 10994. Ten/Year \$36.00.

Career World. Curriculum Innovations, Inc., 501 Lake Forest Avenue, Highwood, Illinois 60040. Monthly during school year-\$3.50 per student school year (minimum 15 subscriptions to one address).

Commission Circular. National Commission for Cooperative Education, 360 Huntington Avenue, Boston, Massachusetts 02115.

Counselor's Information Service. B'Nai B'Rith Career and Counseling Services, 1640 Rhode Island Avenue, N.W., Washington, D.C. 20036. Four/Year—\$9.00.

Illinois Career Education Journal. Illinois Office of Education, 100 North First Street, Springfield, Illinois 62777. Four/Year.

Journal of Career Education. College of Education, 103 Industrial Education Building, University of Missouri-Columbia, Columbia, Missouri 65201. Four/Year—\$8.00.

National Center for Career Education Newsletter. University of Montana, P.O. Box 7815, Missoula, Montana 59807. . . Bimonthly.

National Career Information Center Inform. American Personnel and Guidance Association, 1607 New Hampshire Avenue, N.W., Washington, D.C. 20009. Monthly except June and July. Price to APGA members—\$15.00. Nonmembers—\$25.00. (Subscribers also receive Career Resource Bibliography.)

Vocational Guidance Quarterly. American Personnel and Guidance Association, 1607 New Hampshire Avenue, N.W., Washington, D.C. 20009. Four/Year—\$10.00. Single Copy—\$3.00. (Membership in the National Vocational Guidance Association includes receipt of the Quarterly.)

APPENDIX D

Publishers and Addresses

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INDEX

A

- Abstracts of Selected Practices, 57-61, 69-73, 83-87, 97-101, 121-125, 154-157, 180-186
- Accountability Movement, 6
- Additional Practices
 - lists of, 48-51, 61-64, 73-75, 89-90, 101-102, 126-131, 158-162, 186-188
- Airlie House Conference, 30
- Alaskan Natives, 165
- American Council on Education, 110
- American Indian Students, 165
- American Institutes for Research, 7, 13, 15-17, 147
- American Personnel and Guidance Association, 30, 109
- American Vocational Association, 30, 109
- Asian American Students of Pacific Island Descent, 165

B

- Batch-Processing Systems, 195, 196
- Blacks, 165
- Boston's Placement Bureau, 110
- Brooklyn Boys School, 110

C

- Career Awareness, 80
- Career Education, 8, 65-66, 166

- Career Exploration and occupational self-concept, 80-81
 - in school, 80-81
 - overview of, 81

- Career Exploration Practices, 30
 - abstracts of, 83-87
 - affective domain in, 80
 - characteristics of, 80
 - illustration of, 82-83
 - installation of, 82
 - list of additional, 87-90
 - references for, 90-92

- Career Decision-Making Practices
 - abstracts of, 97-103
 - characteristics of, 94
 - definition of, 93-94
 - illustration of, 96-97
 - installation of, 95-96
 - list of additional, 101-102
 - methods of instruction, 95
 - overview of, 95
 - rationale for, 94
 - references for, 102-104
 - utility of, 94
 - values in, 94

- Career Guidance Curriculum Practices
 - abstracts of, 44-48
 - and the total school program, 28-31
 - avoiding duplication in, 34
 - counselor's role in, 44
 - definition of, 27-28
 - evaluation of, 35
 - guidelines for, 31-35
 - illustration of, 35-44

- installation of, 31-35
 - list of additional, 48-51
 - overview of, 30-31
 - references for, 52
- Career Guidance Periodicals, 239
- Career Guidance Program Change
 - assessing, 228-229
 - building interactive relationships for, 228
 - decisions about, 229
 - establishing the need for, 227-228
 - facilitating adoption and implementation of, 230
 - generating options for, 229
 - major difficulties in, 231-233
 - references for, 234
 - refining and renewing, 230-231
 - strategy for effecting, 227-231
- Career Planning, 79, 147-148
- Career Planning Support System 13-15, 33
- Center for Vocational Education, the (National), 13
- Clinical Counseling, 5
- Community Resources utilizing, 33
- Comprehensive Career Guidance Programs
 - advantages of, 8-9
 - installation strategies for, 219, 221
 - need for, 1, 3, 7
- Comprehensive Career Guidance System (AIR), 15
- Comprehensive Career Guidance Systems Elements, 9
- Computer-Based Career Guidance Practices
 - comparison with counselor functions, 207
 - cost of, 194
 - data from testing, 206-207
 - definition of, 191
 - evaluation criteria for, 204-205
 - illustration of, 207-214
 - indirect applications of, 192
 - installation concerns about, 203-204
 - integration into career guidance programs, 201
 - overview of, 195
 - parent reactions to, 206
 - rationale for, 193
 - references for, 216-218
 - trends in schools, 200-202
 - user reactions to, 205-206
- Cooperative Rural Guidance System, 14, 17
- Counseling Practices
 - change in, 224
 - current vs. past, 221-222
- Counselor(s)
 - as change agents, 226-227
 - role of the complete, 223-224
- Counselor Assistance Costs, 194
- "Crystallization Period," 55
- Culturally Diverse Students, 165

D

Disadvantaged Students, 165
Decision-Making (see: Career
Decision-Making)
Dictionary of Occupational
Titles (DOT), 65

E

Economic Opportunity
Act (1964), 165
Educational Amendments
of 1976, 3
Educational Placement, 106
Educational Resource Infor-
mation Clearinghouses
(ERIC), 255
Emotionally Disturbed
Students, 164
Employability Skills
abstracts of, 138-141
definition of, 134
examples of, 134
list of, 141-143
wanted by employers,
134-135
Employability Skills Prac-
tices
illustration of, 137-138
installation of, 136-137
overview of, 136
rationale for, 135
references for, 143-144
Equity Career Guidance
Practices, 145
purposes of, 146
Eskimos (see Alaskan
Natives)
Ethnic Minorities, 165
Evaluation Resources, 235

F

Far West Educational
Laboratory, 147
Females
changing work patterns
of, 148 (Also see:
Women)
Follow-Up Practices, 106,
107 (Also see: "Placement")
Follow-Through Practices,
106, 108 (Also see:
"Placement")

G

George-Borden Act of
1946, 6
Gifted and Talented Students,
165
Guidance as a Systematic
Program, 6-7
Guidance for Adjustment,
5
Guidance for Development,
6
Guidance for Selection and
Placement, 4-5

H

Handicapped Students, 163-
164
Health Impaired Students,
164
Hispanic American Students,
165
Hypothetical Comprehensive
Career Guidance Program,
9-13

I

Individual Counseling, 3, 33
Instructional Techniques
 re: career guidance curriculum practices, 34

J

Job Placement, 106-107
Job Service, 3

L

Learning Disabled Students,
 164

M

Mentally Retarded Students,
 163
Minority Students, 145
Missouri Comprehensive
 Guidance Program, 14,
 19-20
Multi-Handicapped Students,
 164

N

National Advisory Council
 on Vocational Education,
 109
National Occupational In-
 formation System, 65
National Urban League, 117
National Vocational Guidance
 Association, 6, 195, 199
Native American Students
 (see American Indian
 Students)

O

Occupational Self-Esteem,
 148
Occupational Self-Concept,
 81
Occupational Identity, 66
Occupational Knowledge
 Practices
 abstracts of, 69-73
 and career education, 65-
 66
 definition of, 65
 illustration of, 68-69
 in the school, 65-66
 installation of, 67
 list of, 73-65
 overview of, 66
 pitfalls of, 67
 references for, 76-77
Occupational Mobility, 66
Occupational Outlook
 Handbook, 81
Orthopedically Handicapped
 Students, 164

P

Personal Adjustment, 5, 6
Placement
 historical review of, 110-
 112
Placement, Follow-Up, and
 Follow-Through, 106
Placement Practices
 abstracts of, 121-125
 benefits of, 109-110
 coordination and adminis-
 tration, 113-115
 costs of, 118
 definitions of, 106-107
 illustration of, 119
 installation of, 112-119

- list of, 126-131
- overview of, 110-112
- references, 131-133
- Placement Programs
 - characteristics of, 111
 - five elements of, 111-112
 - image of, 116
 - importance of, 108
 - legislation for, 109
 - longevity of, 116
- Policy Making, 3
- "Preparation Stage," 79
- Private Agencies, 3

R

- References, 52, 64, 76-77, 90-92, 102-104, 131-133, 162, 188-189
- Rehabilitation Agencies, 3

S

- "Self-Concept," 54, 81
- Self-Esteem, 148
- Self-Understanding Practices
 - abstracts of, 57
 - checklist of questions re: 56
 - elements of, 54
 - in the school, 55
 - list of, 61
 - overview of, 55
 - references for, 64
 - self-concept in, 54
- Sex-Fair Career Guidance Practices
 - abstracts of, 154-157
 - illustration of, 151
 - installation of, 150-151
 - list of additional, 158-162
 - overview of, 149-150
 - rationale for, 147-149
 - references for, 162

- Sex-Fair Career Guidance for Women, 146
- Special Needs Career Guidance Practices
 - abstracts of, 180-186
 - illustration of, 168-179
 - installation considerations, 167-168
 - list of additional, 186-188
 - overview of, 166-167
 - rationale for, 165-166
 - references for, 188-189
- Special Needs Populations
 - definitions of, 163-165
- Speech Impaired Students, 164

T

- Teacher and Parent Consultation, 3
- Teacher's Roles
 - in career guidance curriculum, 29, 31-33
- Testing and Scheduling Activities, 3
- Title II, 1976 Educational Amendments, 146

U

- U.S. Bureau of Education for the Handicapped, 163
- U.S. Department of Labor, 30, 117, 150, 200, 201
- U.S. Department of Labor, Office of Employment Security, 193
- U.S. Office of Education, 31, 65, 150
- University of Missouri, U.S. Office of Education Grant, 8

V

- Values
 - in career decision-making, 94
- Visually Handicapped Students, 164
- Vocational Decision-Making, (see also: "Career Decision-Making), 193
- Vocational Education Act of 1963
 - Amendments to the Act, 6
- Vocational Guidance, 4-5, 6 (Also see: "Career Guidance")
- Vocational Guidance Systems Model, 7

W

- Women
 - career guidance for, 145, 148 (Also see: "Equity Career Guidance Practices" and "Sex-Fair Career Guidance Practices")
- Women's Educational Equity Communications Network Project, 147
- Work Entry
 - re: job placement, 106

Z

- Zero Reject Concept, 145